

EROWA®
system solutions



MTS Zero Point Workholding System

The universal interface

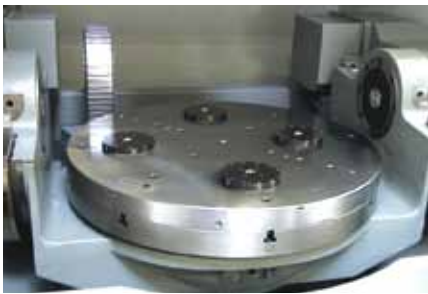
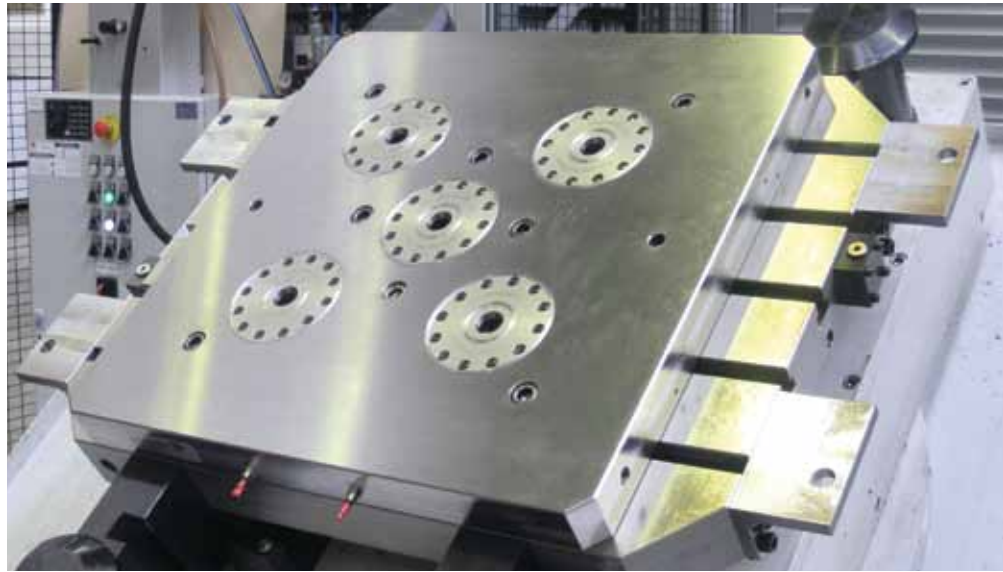


Consistent workholding system

Single palletizing, multiple palletizing, consistent palletizing.



EROWA MTS (Modular Tooling System) is an open workholding system. It offers various usage possibilities: Single palletizing with one MTS chuck or multiple palletizing with several MTS chucks. The MTS chucks are mounted directly on the machine table or integrated into base plates.

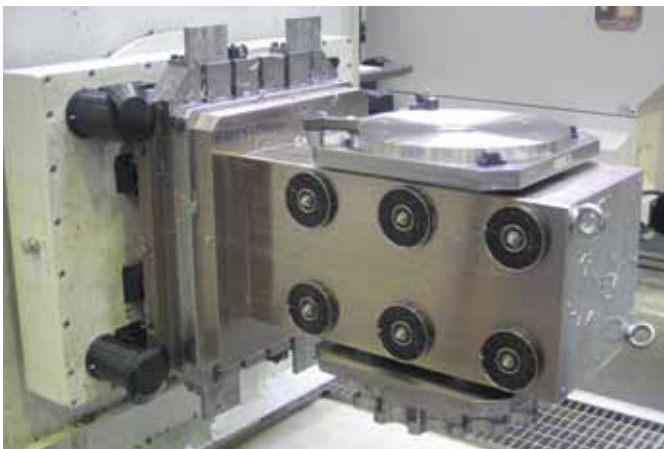


The low installation height of the EROWA MTS workholding system allows plenty of space for workpieces. MTS chucks are mounted on the machine table or integrated directly into it.

MTS base plates are the flexible and precise interface for single or multiple palletizing.

MTS base plates are available in various version. With 2, 4, 6 or 8 chucks, depending on the model. We'll be happy to advise you on customized versions as well.

Variable tombstones. The MTS system is the interface to fixtures and vises.



ALWAYS FITS

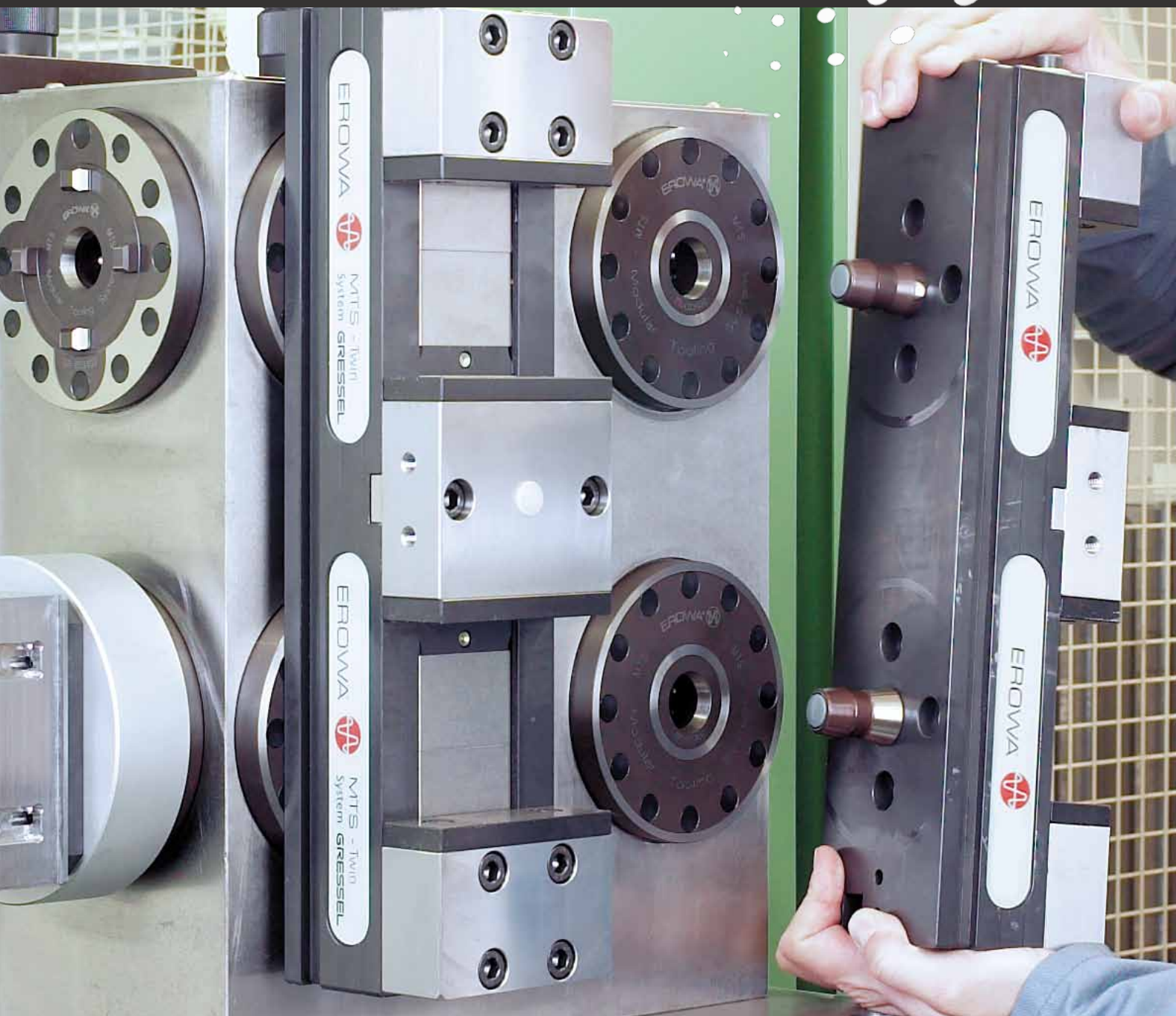
Standardized and consistent interface.

4x90° indexable pallets.

5-sided machining in one set-up.

Minimal set-up times

The standardized interface between the machine and work-piece or fixture allows for quick and precise changeover.



Downtime of the machine is reduced to a minimum by MTS. New orders are set up during primary machining. Prepared jobs are replaced in an instant against finished ones. MTS chucks are operated manually or automatically.



Existing vises, gauges and fixtures are equipped with chucking spigots or palletized and used immediately.



More workpieces are prepared while the machine is in production.



Different jobs on one machine. The conversion of clamping devices takes a few seconds.



TIME-SAVING

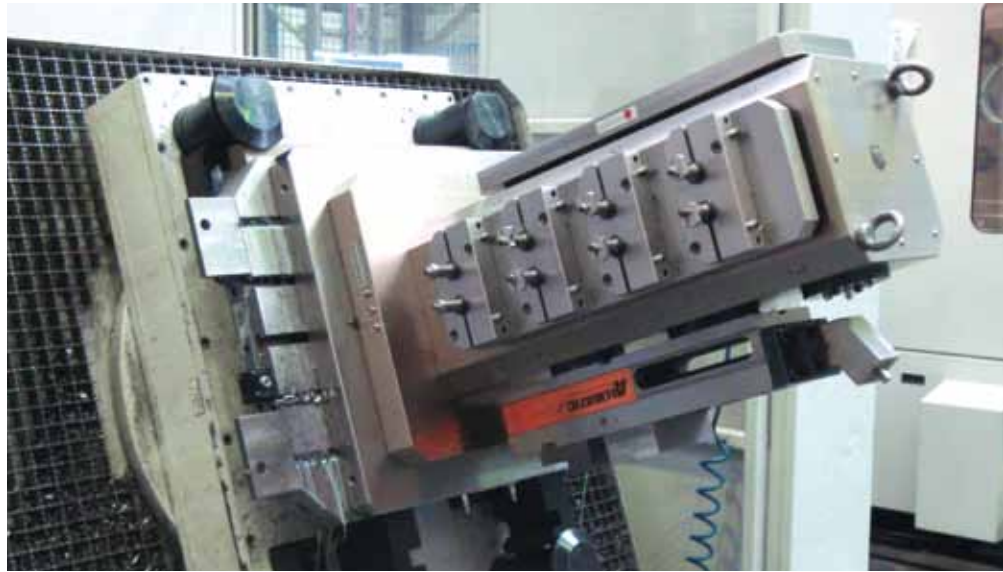
The zero point is defined.
Alignment is not necessary.
Suitable for automatic pallet
changing.

Safe production with MTS+

Monitoring ensures high process reliability.



The MTS+ workholding system and the corresponding control unit provide a quick overview: Is a pallet clamped? Are the chucks opened correctly? Has the pallet been loaded correctly?



Control unit including monitoring, cleaning and reclamping.



The centering and compensation spigots position and center the workpiece carrier with high precision in the MTS chucks.



When changing the workpiece, the contact surfaces of the MTS chucks are cleaned automatically. The MTS pallet is positioned neatly and accurately.

The MTS workholding system lets you palletize even large workpieces safely and accurately.



FULLY MONITORED

Repeatability < 0.003 mm.

The entire control and monitoring is only via two air supply lines.

MTS according to your wishes

Whether standard or specific configuration, the MTS system adapts to any machine situation. We'll be happy to advise you!





Base plate with 13 MTS single chucks.



Special table structure with a large MTS pallet.



MTS pallet with hydraulic clamping elements.



Vacuum clamping on an MTS pallet.



Special MTS base plate, 950 x 950 mm, 12 chucks.



EROWA self-centering vise 148 on MTS pallets.



Swivel table with 8 MTS chuck.



The workpiece size determines the number of required MTS chucks.



MTS base plate with precentering.



Tombstone with various MTS chucks.



Practical applications in the field show the flexible use of the MTS zero-point workholding system.



ALWAYS FITS

Machine-specific solutions.

Modular extensions possible.

Chucking spigots mounted directly on the workpiece.

Increase production through automation

More efficient manufacturing thanks to perfectly matched automation solutions.



By setting up new workpieces during primary machining, the availability of productive hours is considerably increased. In addition, marginal and night hours as well as the weekend can be used productively.

EROWA offers customized handling systems from manual lifting devices to sophisticated robotic systems..



The operator provides the pallets on a loading station arranged at an ergonomically correct working height. By pressing a button, he then commands the robot to pick up and insert the prepared job into an empty pocket in the magazine.



The workpieces to be machined are palletized and stored in the magazine of the handling unit. The EWIS™ identification system provides a clear overview of magazine locations and pallets.



With the EROWA EMC Process Control System, the operator is always in control of all data of the manufacturing cell.



AUTOMATICALLY GOOD

Individually tailored to your needs.

Transfer weight of up to 500 kg.
EROWA Process Control System.

Combined manufacturing

Various other EROWA chucks can be used with MTS pallets. This allows other EROWA system elements to be integrated consistently into the MTS workholding system. The chucks are operated by an air jet or by direct control from the machine.



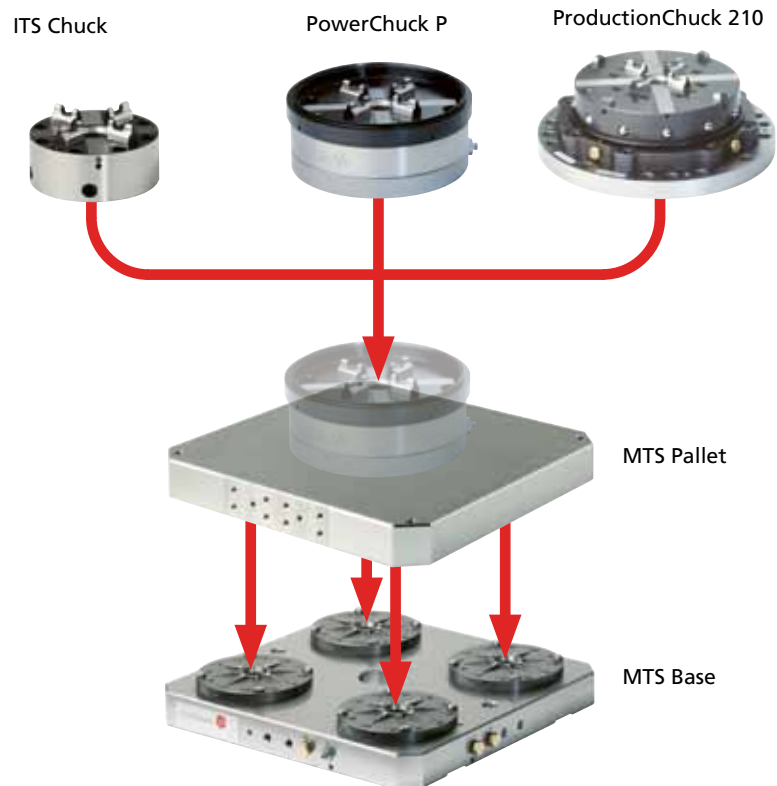
MTS adaptations

Various EROWA chucks (see diagram) can be mounted on MTS pallets. No more than two additional air lines are necessary for control. One for opening and one for cleaning air.

Medium transfer with automatic operation

To operate the chuck mounted on the MTS pallet, the MTS pallet must be equipped with a coupling system. The coupling system serves as the interface between the MTS base plate and the MTS pallet.

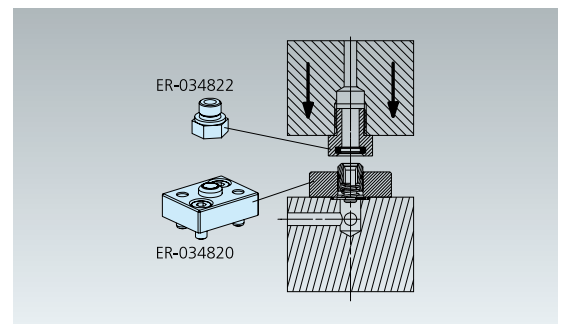
EROWA MTS chucks are operated by compressed air. Other devices and adaptations can be operated hydraulically. For both options, we offer medium coupling systems.



Operation with air - you will need:

ER-034820	MTS air coupling
ER-034822	MTS air coupling pallet 1 piece

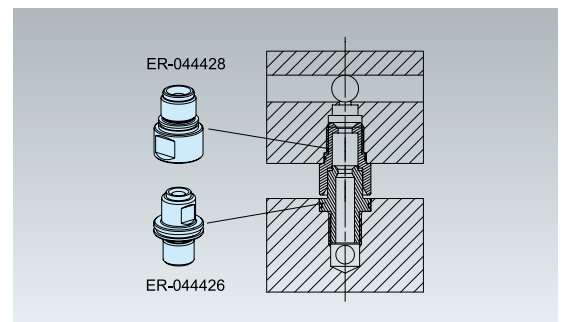
Application	The MTS air coupling ER-034820 combined with the MTS air coupling ER-034822 serves as a pneumatic interface between MTS base plates (A) and MTS pallets (B).
For use	with compressed air.
Working pressure	max. 10 bar.



Operation with oil or air - you will need:

ER-044426	Nipple for MTS base plates
ER-044428	Coupling for MTS pallets

Application	The coupling for MTS pallets ER-044428, in combination with the nipple for MTS base plates ER-044426, serves as an interface for the medium connection between MTS base plates (A) and MTS pallets (B).
For use	with compressed air, with vacuum, with oil.
Working pressure	max. 200 bar.
Important	Docking- and undocking only depressurized.



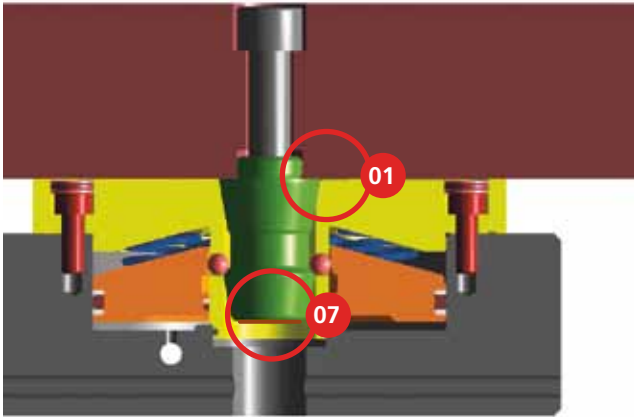
Accurately positioned

The ingenious short-taper centering feature positions the workpiece carriers with high precision.



The advantages of short-taper centering

The chucking spigot is deformed by high pulling powers within the elastic limit. This pulls the pallet up to the Z support. The result is play-free, robust and vibration-resistant centering.



01 | Precise

Play-free short-taper centering.
Easy insertion of pallets.

07 | Protected

The protective cap protects the
Z-support during insertion
of the pallet.

SHORT-TAPER CENTERING AT A GLANCE

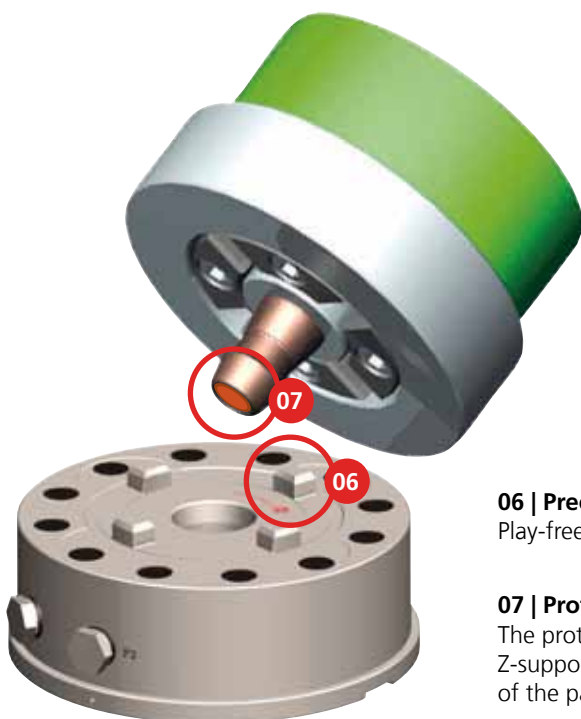
High repeatability.

Compensating for thermal
growth.

Conical centering for easy insertion
and extraction of pallets.

Single palletizing with prism-centering

The centering elements are deformed by high pulling powers within the elastic limit. The resulting play-free centering absorbs even high vibration powers with ease.



06 | Precise

Play-free prism-centering.

07 | Protected

The protective cap protects the
Z-support during insertion
of the pallet.

PRISM-CENTERING AT A GLANCE

High repeatability.

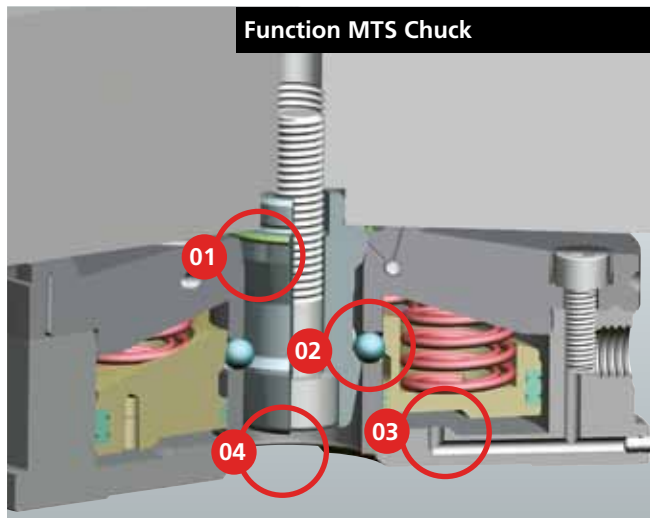
4x90° indexing of pallets.

Stable and play-free centering.

Impressive technology

Continuous development and high quality make the MTS zero-point workholding system the standard for efficient and precise clamping of workpieces



**01 | Precise**

Play-free round-cone centering.
Repeatability: <0.005 mm.
Easy insertion of the pallets.

02 | Clamping mechanism

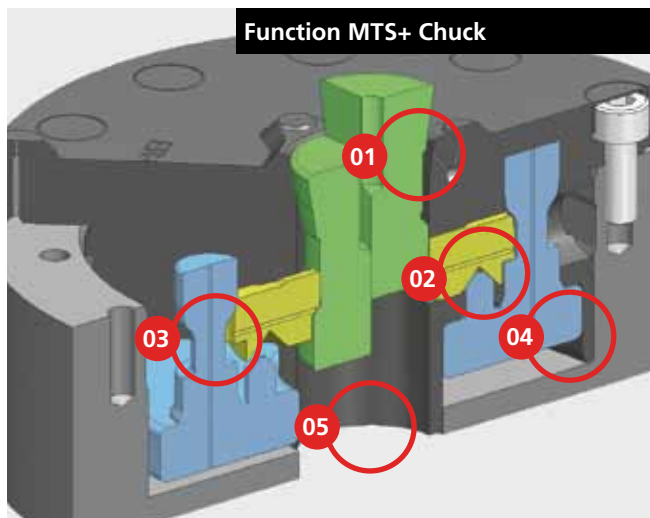
Reliable clamping mechanism through self-locking ball lock.

03 | Open

MTS are operated pneumatically.

04 | Cleanliness

Liquids can drain off. No dirt traps.

**01 | Precise**

Play-free round-cone centering.
Repeatability: <0.003 mm.
Easy insertion of the pallets.

02 | Clamping mechanism

Clamping by means of state-of-the-art slide technology. Very high rigidity!

03 | Locking

Self-locking clamping technology.

04 | Piston

Working piston moves in a hardened, completely sealed chuck casing.

05 | Cleanliness

Liquids can drain off. No dirt traps.

TECHNICAL DATA MTS CHUCKS

Typ	MTS81	MTS	MTS+
Repeatability	<0.005 mm	<0.005 mm	<0.003 mm
Activation	clamped without pressure	clamped without pressure	clamped without pressure
Opening pressure	min. 8.5 bar	min. 7 bar	min. 8.5 bar
Process monitoring	presence check	presence check	pneumatic: open, closed, clamped, presence check of pallet and chucking spigot
Cleaning (P3)	on automatic chucks	on automatic chucks	on automatic chucks
Reclamp	yes (on P4)	no	yes (on P3)
Clamping power	10,000 N/chuck *	12,000 N/chuck	18,000 N/chuck *
Holding power	> 60,000 N/chuck	> 60,000 N/chuck	> 60,000 N/chuck
Clamping cycles	> 500,000	> 500,000	> 500,000
Pneumatic connections	P2 / P3 / P4	P2 / P3	P2 / P3

* with reclamping

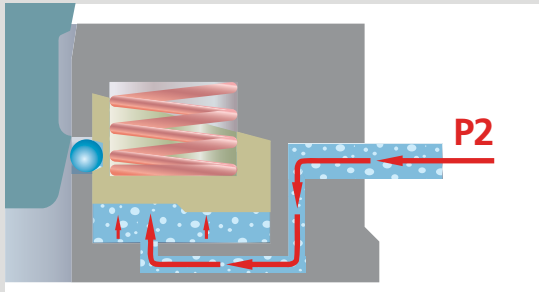
Outstanding properties

The MTS zero-point workholding system has many outstanding features. All of these features fit together to create the optimized overall picture of the MTS system.



MTS Chuck

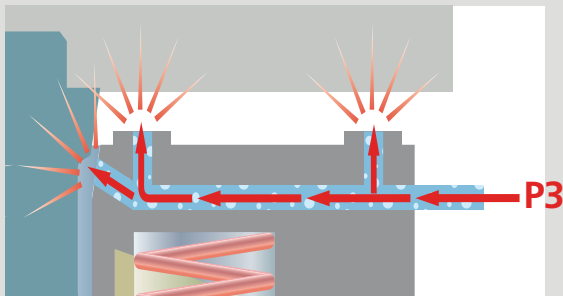
A mere 7 bar of opening pressure results in 12,000 N clamping power thanks to internal power boosting.



Connection P2: Opening

MTS chuck, automatable

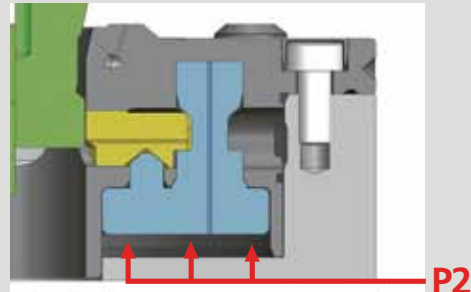
Automatic cleaning of contact surfaces and of the centering spigot cone while the workpiece is changed.



Connection P3: cleaning

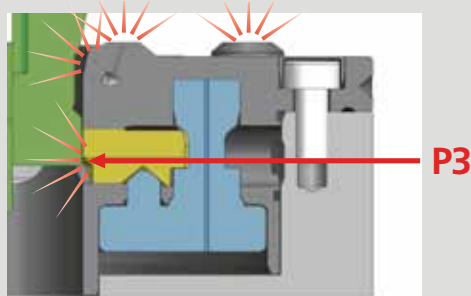
MTS+ Chuck

MTS+ chucks require only 8.5 bar opening pressure despite their very high clamping power of 18,000 N.



Connection P2: Opening & open check

The entire control and monitoring system of the MTS+ chucks requires only 2 air supply lines!



Connection P3: Reclamping, cleaning and monitoring.

THE ADVANTAGES OF MTS

MTS clamps by self-locking spring force – safely even in case of pressure loss.

MTS clamps with coil springs – the lifetime of these springs is far superior to that of disk springs.

System consistency is guaranteed within the entire MTS product family.

Unique single palletizing for zero-point system thanks to prism centering.

Long service life thanks to low-wear seal and guide components.

Protective caps on the chucking spigots protect the chucks from damage during insertion of the pallets.

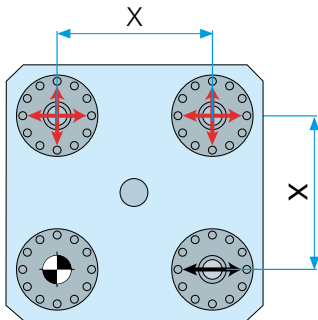
The automatic MTS chucks feature a built-in cleaning feature for all major functional surfaces.

Thanks to recess-free surfaces, cleaning is easy also on manual MTS chucks.

Tips & tricks

On these two pages we have collected frequently asked questions and their answers.

Set-up distance



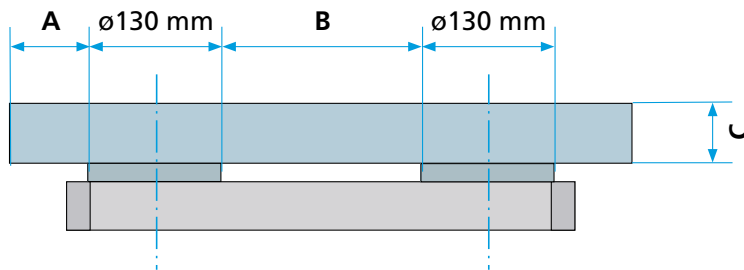
The set-up distance (X) is the distance between the centers of two MTS chucks.

MTS base plates are delivered with a standard set-up distance of 200 mm or 250 mm.

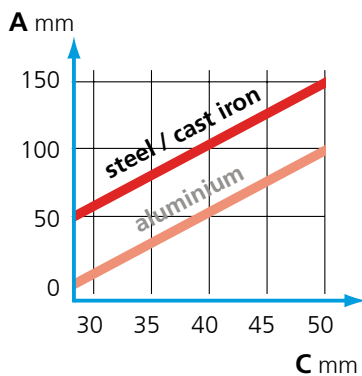
The minimum set-up distance for integral chucks is 140 mm.

The minimum set-up distance for mounting chucks is 200 mm.

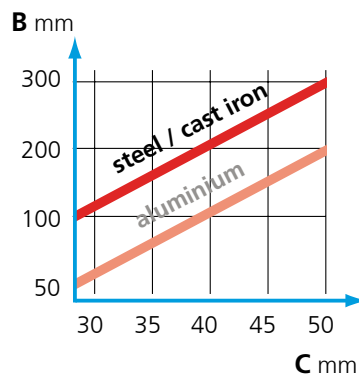
Pallet overhang



The pallet overhang (A) (B) affects stability and precision of the whole set-up. The shorter the distances, the better the results.

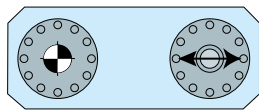


Maximum overhang **A**

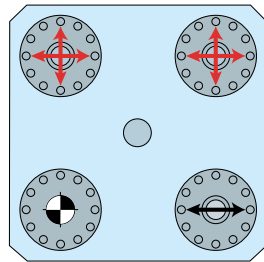


Maximum distance **B**

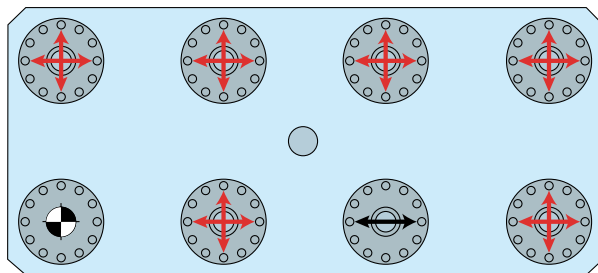
Arrangement of MTS chucking spigots – Examples



MTS pallet 2-fold



MTS pallet 4-fold



MTS pallet 8-fold

ER-033800 MTS centering spigot

ER-038000 centering spigot / A

The centering spigot defines the zero point (play-free).



ER-039200 MTS chucking spigot / A

(centering play 0.1 mm).

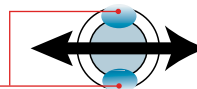


ER-039201 MTS compensation spigot / A

The compensation spigot positions the pallet in only one axis (X or Y) and compensates dimensional differences due to thermal growth.

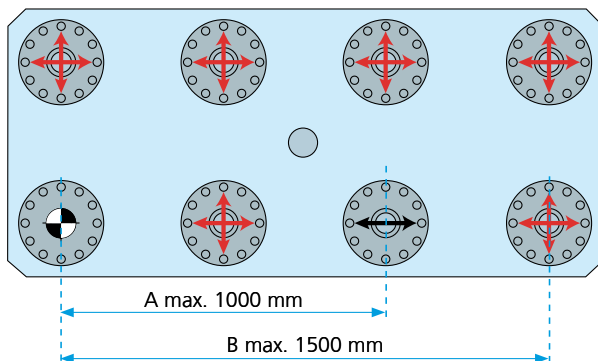


centering surfaces



Please note: All order numbers can be found on p. 50.

Chucking spigot distance



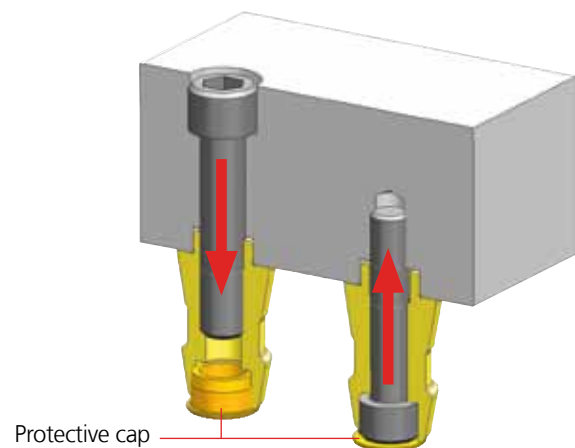
A | Maximum distance between the MTS centering spigot and the MTS compensation spigot.

B | Maximum distance between the MTS centering spigot and the MTS compensation spigot.

Installation of MTS chucking spigots

The MTS clamping spigots can be attached to the pallet from below or from above.

- Low installation height.
- Easy production of specialty pallets.
- Chucking spigots mounted directly on the workpiece.



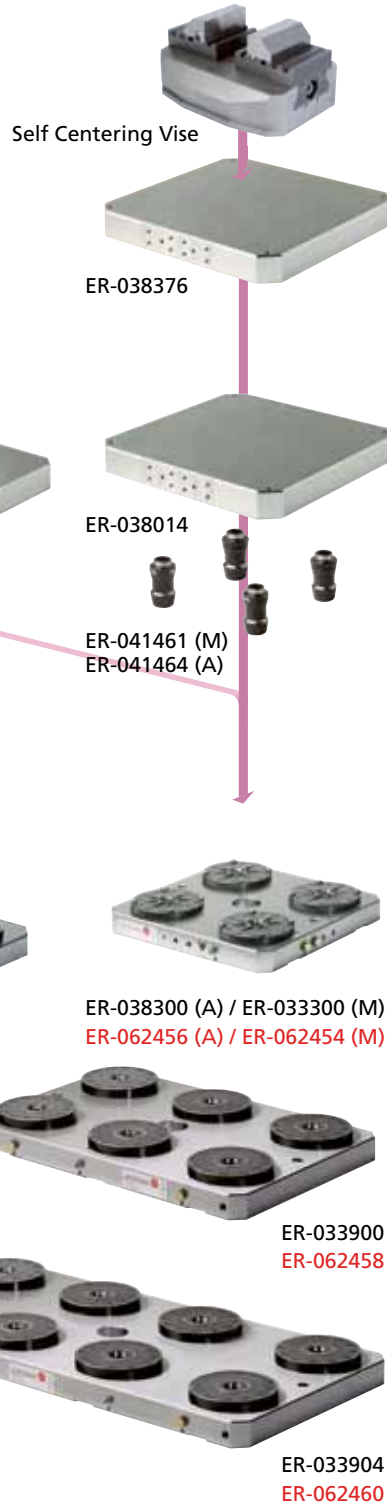
The components

EROWA provides you with a full range of products – everything fits together!

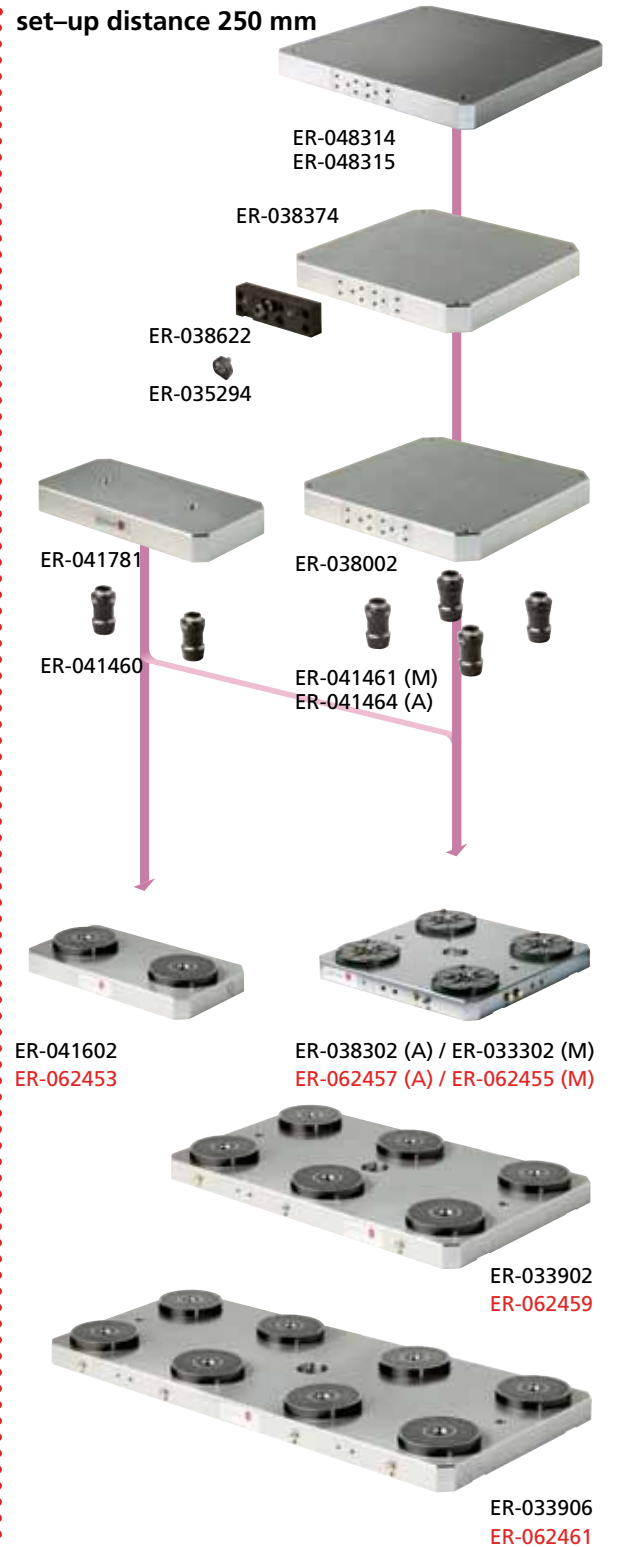
MTS chucks
MTS+ chucks

(M) = manual
(A) = automatic

















set-up distance 200 mm



set-up distance 250 mm



To make it easier for you to find your way about the fields of application for EROWA products, we use the following symbols in all our documents:

- | | |
|-------------------------------------------------------------------------------------|------------------------------------------------|
|  | 1. Manual operation |
|  | 2. Operate with compressed air jet |
|  | 3. Operate with manual valve |
|  | 4. Operate with manual control unit |
|  | 5. Operate with electro-pneumatic control unit |
|  | 6. With central flushing clearance |
|  | 7. Suited for submerged operation |
|  | 8. Corrosion-resistant material |
|  | 9. Suited for automatic operation |
|  | 10. Handling with EROWA Robot gripper S |
|  | 11. Handling with EROWA Combi gripper |
|  | 12. Handling with EROWA Robot gripper 72 |
|  | 13. Handling with EROWA Robot gripper 115 |
|  | 14. Handling with EROWA Robot gripper 148 |
|  | 15. Handling with EROWA gripper RN PC 210 |
|  | 16. Handling with EROWA RCS gripper |

EROWA MTS PALLETIZING SYSTEM

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For chip-removing processes



For EDM sinking



For WEDM

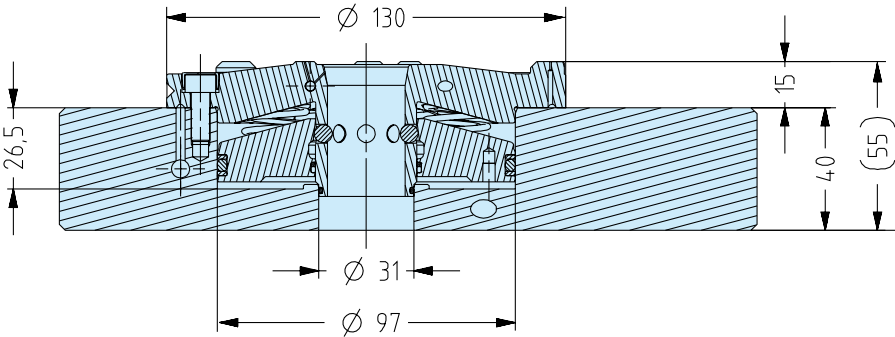
EROWA MTS

Integral chucks

Technical data	MTS integral chucks	
	pneumatic	hydraulic
Repeatability	<0.005 mm	<0.005 mm
Indexation, pallet	4 x 90° (MTS IntegralChuck S)	
Clamping	Spring tension	Spring tension
Opening pressure	min. 7 bar	min. 25 /max. 35 bar
Process monitoring	pneumatic	pneumatic
Clamping power	12,000 N/chuck	20,000 N/chuck

- S = Single
- M = Multi
- A = able to automate
- P = pneumatically operated
- H = hydraulically operated

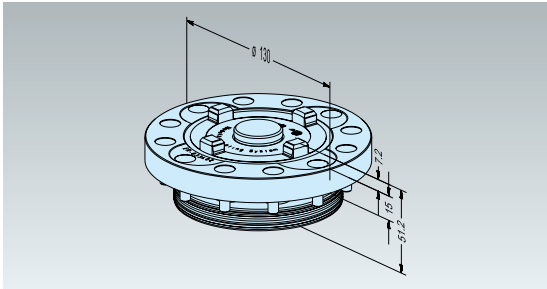
Integration variant (applicable to MTS IntegralChucks Single and Multi).
Observe tolerances according to integration instructions!



ER-033402	MTS IntegralChuck S-P
ER-033403	MTS IntegralChuck S-H



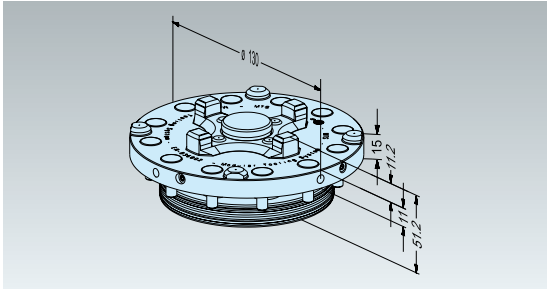
- Version: For direct integration in machine tables, plates, tombstones, squares or dividing heads.
- Connections: To open: pneumatic or hydraulic.
- Application: To accommodate single or multiple pallets.



ER-036802	MTS IntegralChuck S-P/A
ER-036803	MTS IntegralChuck S-H/A



- Version: For direct integration in machine tables, plates, tombstones, squares or dividing heads.
- Connections: To open: pneumatic or hydraulic.
To clean: pneumatic.
- Application: To accommodate single or multiple pallets.

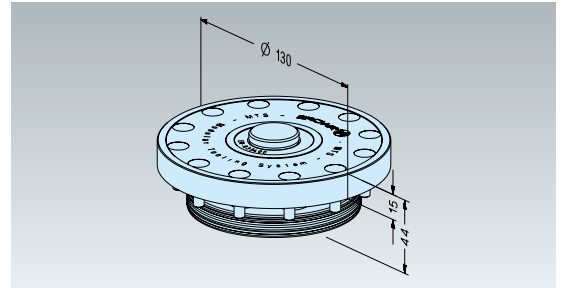


ER-033400 MTS IntegralChuck M-P
ER-033401 MTS IntegralChuck M-H


Version For direct integration in machine tables, plates, tombs-tones, squares or dividing heads.

Connections To open: pneumatic or hydraulic.

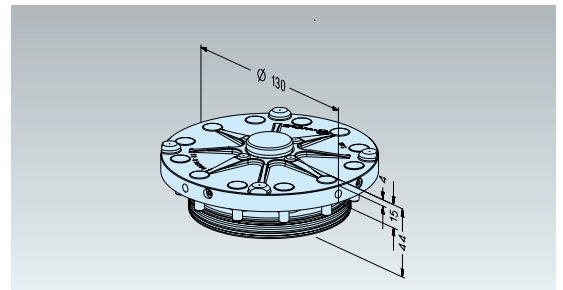
Application To accommodate multiple pallets.


ER-036800 MTS IntegralChuck M-P/A
ER-036801 MTS IntegralChuck M-H/A


Version For direct integration in machine tables, plates, tombs-tones, squares or dividing heads.

Connections To open: pneumatic or hydraulic.
To clean: pneumatic.

Application To accommodate single pallets.

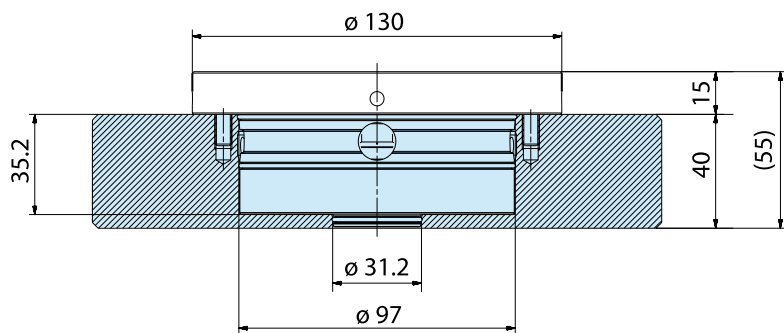


EROWA MTS+ Integral chucks

Technical data	MTS+ integral chucks pneumatic
Repeatability	<0.003 mm
Indexation, pallet	4 x 90° (MTS+ IntegralChuck S)
Clamping	Spring tension
Opening pressure	min. 8.5 bar
Process monitoring	open, closed, clamped
Clamping power with reclamping	up to 18,000 N/chuck

S = Single
M = Multi
A = automatable
P = pneumatically operated

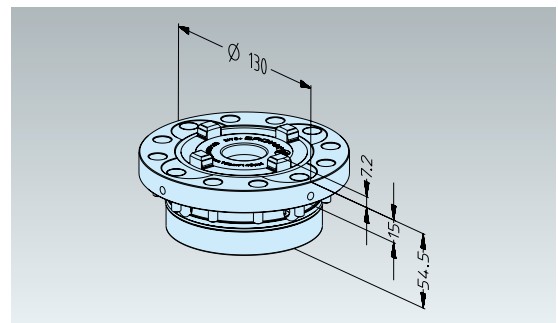
Integration variant (applicable to MTS+ IntegralChucks Single and Multi).
Observe tolerances according to integration instructions!



ER-062446 MTS+ IntegralChuck S-P



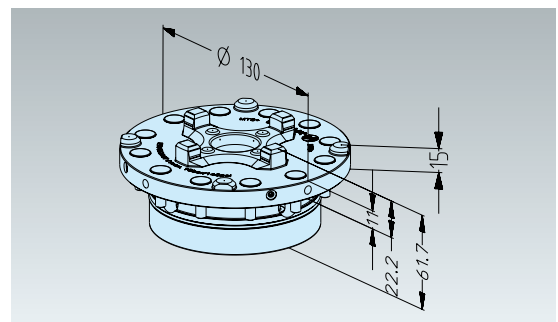
Version For direct integration in machine tables, plates, tombstones, squares or dividing heads.
Connections 2 pneumatic connections: one for opening, and one for monitoring and reclamping.
Application To accommodate single or multiple pallets.



ER-062447 MTS+ IntegralChuck S-P/A

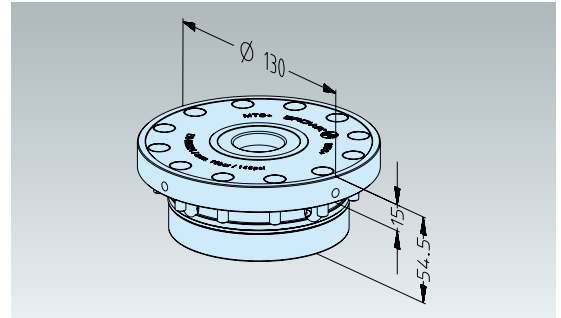


Version For direct integration in machine tables, plates, tombstones, squares or dividing heads.
Connections 2 pneumatic connections: one for opening, and one for cleaning, monitoring and reclamping.
Application To accommodate single or multiple pallets

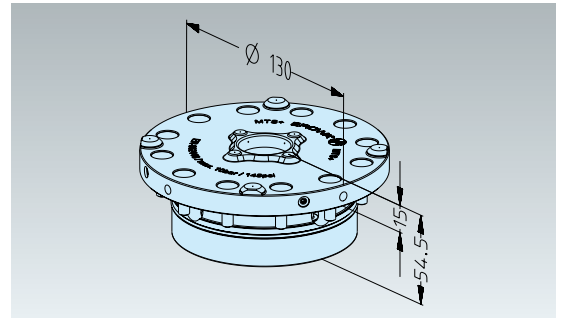


ER-062221 MTS+ IntegralChuck M-P

- Version For direct integration in machine tables, plates, tombstones, squares or dividing heads.
- Connections 2 connections: one for opening, and one for monitoring and reclamping.
- Application To accommodate multiple pallets.

**ER-062448 MTS+ IntegralChuck M-P/A**

- Version For direct integration in machine tables, plates, tombstones, squares or dividing heads.
- Connections 2 pneumatic connections: one for opening, and one for cleaning, monitoring and reclamping.
- Application To accommodate multiple pallets.



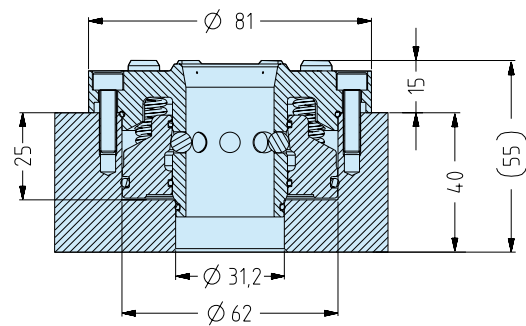
EROWA MTS 81

Integral chucks

Technical data	MTS 81 integral chucks
	pneumatic
Repeatability	<0.005 mm
Clamping	Spring tension
Opening pressure	min. 8.5 bar
Process monitoring	pneumatic
Clamping power	
with reclamping	up to 10,000 N/chuck

M = Multi
A = automatable
P = pneumatically operated

Integration variant applicable to MTS 81 IntegralChucks.
Observe tolerances according to integration instructions!



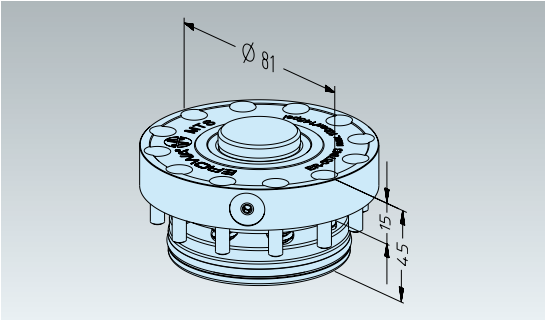
ER-057943 MTS 81 IntegralChuck M-P



Version To be fitted directly to machine tables, plates, tombstones, squares or dividing heads. Suitable for manual loading.

Connections 2 pneumatic connections: one for opening and one for reclamping.

Application To accommodate multiple pallets.



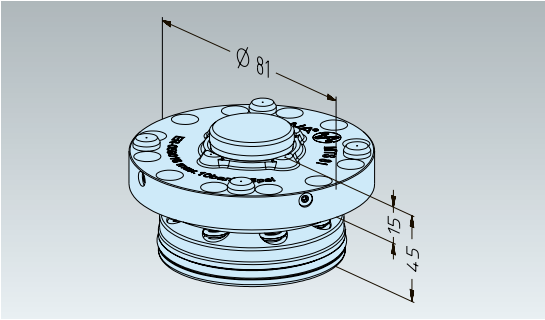
ER-059016 MTS 81 IntegralChuck M-P/A



Version To be fitted directly to machine tables, plates, tombstones, squares or dividing heads. Suitable for auto-matic loading.

Connections 3 pneumatic connections: one for opening, one for reclamping, and one for presence checks and cleaning.

Application To accommodate multiple pallets.





EROWA MTS

Mounted chucks

Technical data	MTS mounted chucks
	pneumatic
Repeatability	<0.005 mm
Indexation, pallet	4 x 90° (MTS Chuck S)
Clamping	Spring power
Opening pressure	min. 7 bar
Process monitoring	pneumatic
Clamping power	12,000 N/Chuck

S = Single
M = Multi
A = able to automate
P = pneumatically operated

ER-033502 MTS Chuck S-P

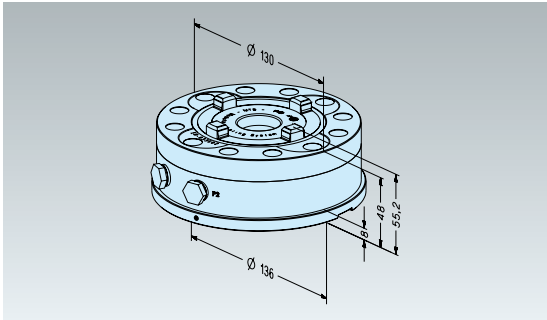


Version For direct mounting on machine tables, plates, tombs-
tones, squares or dividing heads.

Connections Lateral, to open: pneumatic.

Application To accommodate single or multiple pallets.

Accessories Order separately: to fit MTS Chuck, MTS bracket
ER-033804 or ER-033805.



ER-035502 MTS Chuck S-P/A

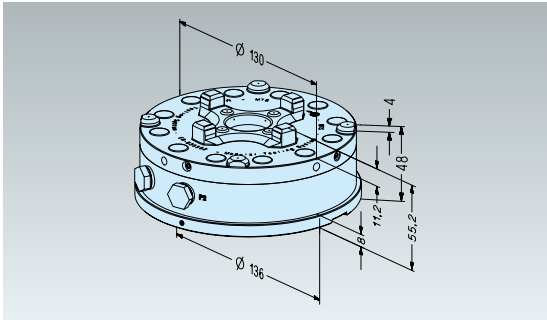


Version For direct mounting on machine tables, plates, tombs-
tones, squares or dividing heads.

Connections Lateral, to open: pneumatic.
Lateral to clean: pneumatic

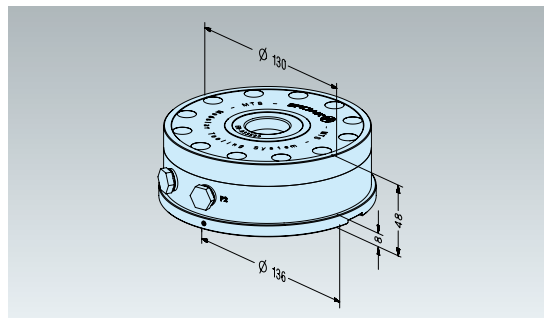
Application To accommodate single or multiple pallets.

Accessories Order separately: to fit MTS Chuck, MTS bracket
ER-033804 or ER-033805.

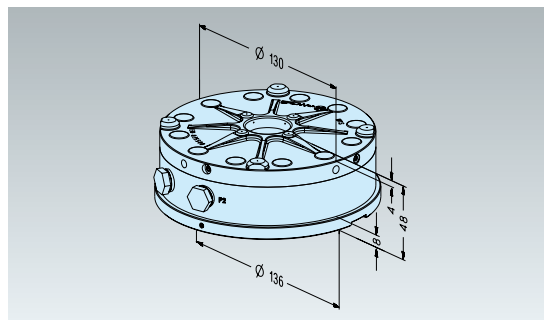


ER-033500 MTS Chuck M-P


- Version For direct mounting on machine tables, plates, tombs-tones, squares or dividing heads.
- Connections Lateral, to open: pneumatic.
- Application To accommodate single or multiple pallets.
- Accessories Order separately: to fit MTS Chuck, MTS bracket ER-033804 or ER-033805.


ER-035500 MTS Chuck M-P/A


- Version For direct mounting on machine tables, plates, tombs-tones, squares or dividing heads.
- Connections Lateral, to open: pneumatic.
Lateral to clean: pneumatic.
- Application To accommodate single or multiple pallets.
- Accessories Order separately: to fit MTS Chuck, MTS bracket ER-033804 or ER-033805.



EROWA MTS+ Mounted chucks

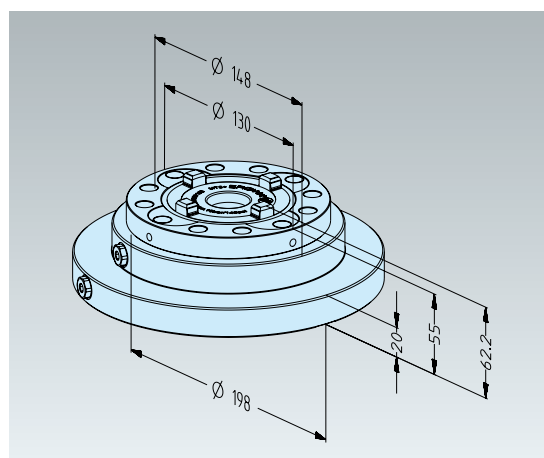
Technical data	MTS+ mounted chucks pneumatic
Repeatability	<0.003 mm
Indexation, pallet	4 x 90° (MTS+ Chuck S)
Clamping	Spring tension
Opening pressure	min. 8.5 bar
Process monitoring	open, closed, clamped
Clamping power with reclamping	up to 18,000 N/chuck

S = Single
 M = Multi
 A = automatable
 P = pneumatically operated

ER-062449 MTS+ Chuck S-P



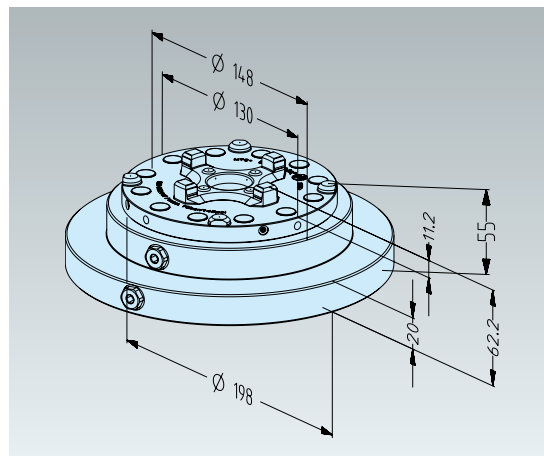
Version	For direct mounting on machine tables, plates, tombstones, squares or dividing heads.
Connections	2 lateral pneumatic connections: one for opening, and one for monitoring and reclamping.
Application	To accommodate single or multiple pallets.



ER-062450 MTS+ Chuck S-P/A

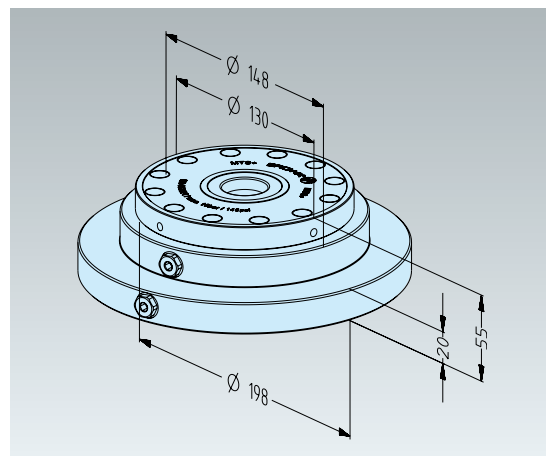


Version	For direct mounting on machine tables, plates, tombstones, squares or dividing heads.
Connections	2 lateral pneumatic connections: one for opening, and one for cleaning, monitoring and reclamping.
Application	To accommodate single or multiple pallets.

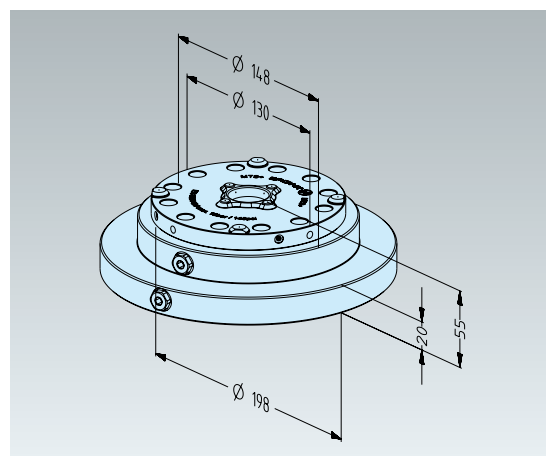


ER-062451 MTS+ Chuck M-P


- Version For direct mounting on machine tables, plates, tombstones, squares or dividing heads.
- Connections 2 lateral pneumatic connections: one for opening, and one for monitoring and reclamping.
- Application To accommodate single or multiple pallets.


ER-062452 MTS+ Chuck M-P/A


- Version For direct mounting on machine tables, plates, tombstones, squares or dividing heads.
- Connections 2 lateral pneumatic connections: one for opening, and one for cleaning, monitoring and reclamping.
- Application To accommodate single or multiple pallets.



EROWA MTS

Base plates, 2-fold

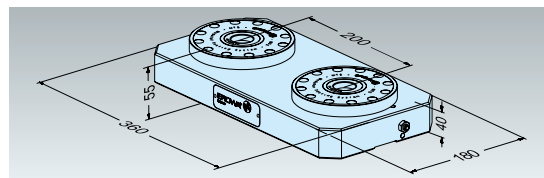
Technical data	MTS base plates, 2-fold pneumatic
Repeatability	<0.005 mm
Indexation, pallet	1 x 180°
Clamping	Spring power
Opening pressure	min. 7 bar
Process monitoring	pneumatic
Clamping power	24,000 N (2 x 12,000 N)

P = pneumatically operated

ER-041600 MTS base plate 180 x 360 / 200 P



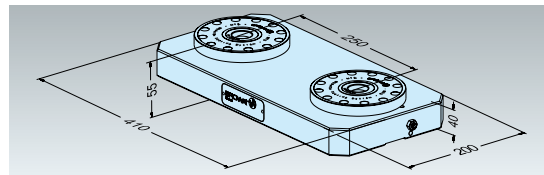
Version	Base plate, steel, unhardened; set-up distance 200 mm.
Connections	Lateral, to open: pneumatic.
Application	To accommodate double pallets. For direct assembly on machine tables.
Accessories supplied	1 x ER-036672.
Note	Attachment boreholes can be drilled by customers.
Caution	Do not drill through any air ducts! Please order operating instructions from your EROWA dealer.



ER-041602 MTS base plate 200 x 410 P



Version	Base plate, steel, unhardened; set-up distance 250 mm.
Connections	Lateral, to open: pneumatic.
Application	To accommodate double pallets. For direct assembly on machine tables.
Accessories supplied	1 x ER-036672.
Note	Attachment boreholes can be drilled by customers.
Caution	Do not drill through any air ducts! Please order operating instructions from your EROWA dealer.



EROWA MTS+

Base plates, 2-fold

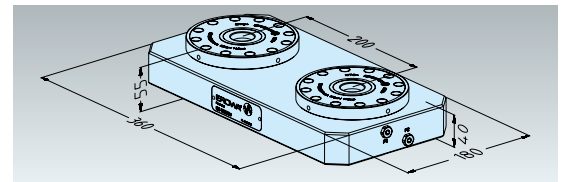
Technical data	MTS+ base plates, 2-fold pneumatic
Repeatability	<0.003 mm
Indexation, pallet	1 x 180°
Clamping	Spring tension
Opening pressure	min. 8.5 bar
Process monitoring	pneumatic
Clamping power with reclamping	up to 36,000 N (2 x 18,000 N)

P = pneumatically operated

ER-062364 MTS+ base plate 180 x 360 P



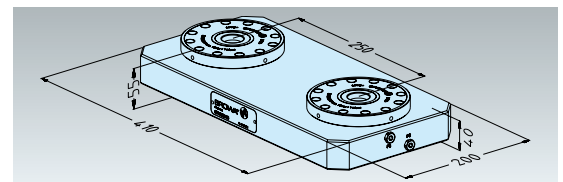
Version	Base plate, steel, unhardened; set-up distance 200 mm.
Connections	2 lateral pneumatic connections: one for opening, and one for monitoring and reclamping.
Application	To accommodate double pallets. For direct assembly on machine tables.
Accessories	Supplied: 2 x ER-014326 threaded connector, straight, Ø 6 2 x ER-002675 plugs, Ø 6 1 x ER-014324 threaded connector, straight, Ø 4 1 x ER-002673 plug, Ø 4 Optional: 1 x ER-063545 nipple, G1/8" 1 x ER-064499 fast coupling
Note	Attachment boreholes can be drilled by customers.
Caution	Do not drill through any air ducts! Please order operating instructions from your specialist EROWA dealer.



ER-062453 MTS+ base plate 200 x 410 P



Version	Base plate, steel, unhardened; set-up distance 250 mm.
Connections	2 lateral pneumatic connections: one for opening, and one for monitoring and reclamping.
Application	To accommodate double pallets. For direct assembly on machine tables.
Accessories	Supplied: 2 x ER-014326 threaded connector, straight, Ø 6 2 x ER-002675 plugs, Ø 6 1 x ER-014324 threaded connector, straight, Ø 4 1 x ER-002673 plug, Ø 4 Optional: 1 x ER-063545 nipple, G1/8" 1 x ER-064499 fast coupling
Note	Attachment boreholes can be drilled by customers.
Caution	Do not drill through any air ducts! Please order operating instructions from your specialist EROWA dealer.

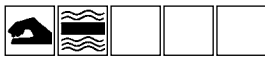


EROWA MTS 81

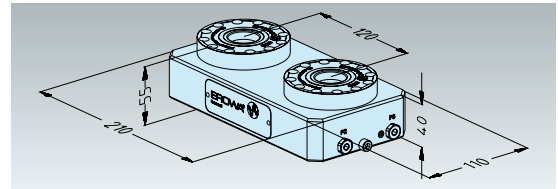
Base plates, 2-fold

Technical data	MTS 81 Base plates, 2-fold pneumatic
Repeatability	<0.005 mm
Indexation, pallet	1 x 180°
Clamping	Spring tension
Opening pressure	min. 8.5 bar
Process monitoring	pneumatic
Clamping power	up to 20,000 N
with reclamping	(2 x 10,000 N)

A = automatable
P = pneumatically operated

ER-063134 MTS 81 base plate 110 x 210 P
Pitch 120 mm


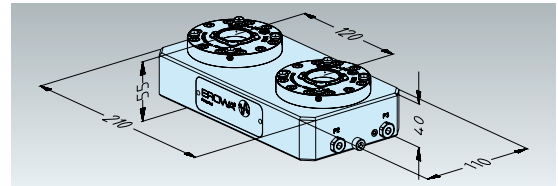
Version	Base plate, steel, unhardened; set-up distance 120 mm.
Connections	2 lateral pneumatic connections: one for opening and one for reclamping.
Application	To accommodate double pallets. For direct assembly on machine tables.
Accessories supplied	2 x ER-014326 threaded connector, straight, Ø 6 2 x ER-002675 plugs, Ø 6 1 x ER-014324 threaded connector, straight, Ø 4 1 x ER-002673 plug, Ø 4
Note	Attachment boreholes can be drilled by customers.
Caution	Do not drill through any air ducts! Please order operating instructions from your specialist EROWA dealer.



EROWA MTS 81

Base plates, 2-fold
with cleaning facility, automatable
ER-063135 MTS 81 base plate 110 x 210 P/A
Pitch 120 mm


Version	Base plate, steel, unhardened; set-up distance 120 mm.
Connections	3 lateral pneumatic connections: one for opening, one for cleaning and one for reclamping.
Application	To accommodate multiple pallets. For direct assembly on machine tables.
Accessories supplied	2 x ER-014326 threaded connector, straight, Ø 6 2 x ER-002675 plugs, Ø 6 1 x ER-014324 threaded connector, straight, Ø 4 1 x ER-002673 plug, Ø 4
Note	Attachment boreholes can be drilled by customers.
Caution	Do not drill through any air ducts! Please order operating instructions from your specialist EROWA dealer.



EROWA MTS 81

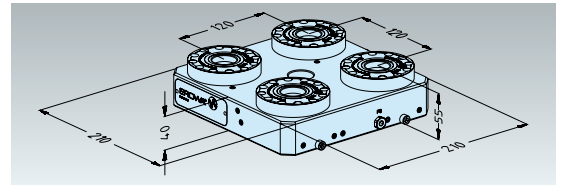
Base plates, 4-fold

Technical data	MTS 81 Base plates, 4-fold pneumatic
Repeatability	<0.005 mm
Indexation, pallet	4 x 90°
Clamping	Spring tension
Opening pressure	min. 8.5 bar
Process monitoring	pneumatic
Clamping power	up to 40,000 N
with reclamping	(4 x 10,000 N)

ER-063136 MTS 81 base plate 210 x 210 P Pitch 120 mm



Version	Base plate, steel, unhardened; set-up distance 120 mm.
Connections	2 lateral pneumatic connections: one for opening and one for reclamping.
Application	To accommodate multiple pallets. For direct assembly on machine tables.
Accessories supplied	2 x ER-014326 threaded connector, straight, Ø 6 2 x ER-002675 plugs, Ø 6 1 x ER-014324 threaded connector, straight, Ø 4 1 x ER-002673 plug, Ø 4
Note	Attachment boreholes can be drilled by customers.
Caution	Do not drill through any air ducts! Please order operating instructions from your specialist EROWA dealer.



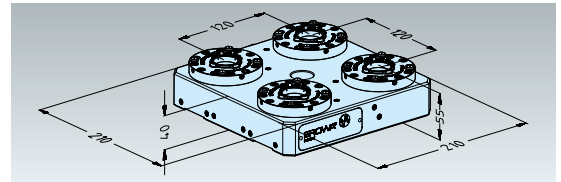
EROWA MTS 81

Base plates, 4-fold with cleaning facility, automatable

ER-063137 MTS 81 base plate 210 x 210 P/A Pitch 120 mm



Version	Base plate, steel, unhardened; set-up distance 120 mm.
Connections	3 lateral pneumatic connections: one for opening, one for cleaning and one for reclamping.
Application	To accommodate multiple pallets. For direct assembly on machine tables.
Accessories supplied	2 x ER-014326 threaded connector, straight, Ø 6 2 x ER-002675 plugs, Ø 6 1 x ER-014324 threaded connector, straight, Ø 4 1 x ER-002673 plug, Ø 4
Note	Attachment boreholes can be drilled by customers.
Caution	Do not drill through any air ducts! Please order operating instructions from your specialist EROWA dealer.



EROWA MTS

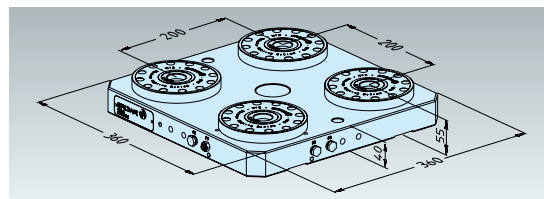
Base plates, 4-fold

Technical data	MTS base plates, 4-fold pneumatic
Repeatability	<0.005 mm
Clamping	Spring power
Opening pressure	min. 7 bar
Process monitoring	pneumatic
Clamping power	48,000 N (4 x 12,000 N)

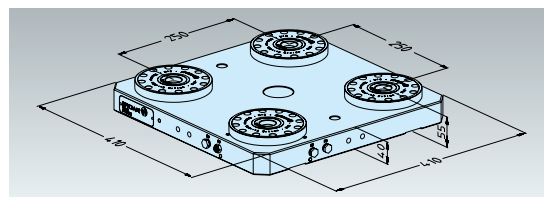
P = pneumatically operated

ER-033300 MTS base plate 360 x 360 P

Version	Base plate, steel, unhardened; set-up distance 200 mm.
Connections	Lateral, to open: pneumatic.
Application	To accommodate multiple pallets. For direct assembly on machine tables.
Accessories supplied	1 x ER-036672.
Note	Attachment boreholes can be drilled by customers.
Caution	Do not drill through any air ducts! Please order operating instructions from your EROWA dealer.

**ER-033302 MTS base plate 410 x 410 P**

Version	Base plate, steel, unhardened; set-up distance 250 mm.
Connections	Lateral, to open: pneumatic.
Application	To accommodate multiple pallets. For direct assembly on machine tables.
Accessories supplied	1 x ER-036672.
Note	Attachment boreholes can be drilled by customers.
Caution	Do not drill through any air ducts! Please order operating instructions from your EROWA dealer.



EROWA MTS+

Basisplatten, 4-fach

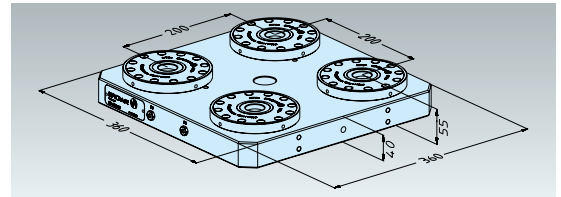
Technical data	MTS+ base plates, 4-fold pneumatic
Repeatability	<0.003 mm
Indexation, pallet	4 x 90°
Clamping	Spring tension
Opening pressure	min. 8.5 bar
Process monitoring	pneumatic
Clamping power	up to 72,000 N
with reclamping	(4 x 18,000 N)

P = pneumatisch betätigt

ER-062454 MTS+ base plate 360 x 360 P



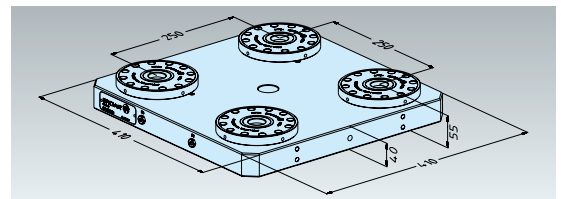
Version	Base plate, steel, unhardened; set-up distance 200 mm.
Connections	2 lateral pneumatic connections: one for opening, and one for monitoring and reclamping.
Application	To accommodate multiple pallets. For direct assembly on machine tables.
Accessories	Supplied: 2 x ER-014326 threaded connector, straight, Ø 6 2 x ER-002675 plugs, Ø 6 1 x ER-014324 threaded connector, straight, Ø 4 1 x ER-002673 plug, Ø 4 Optional: 1 x ER-063545 nipple, G1/8" 1 x ER-064499 fast coupling
Note	Attachment boreholes can be drilled by customers.
Caution	Do not drill through any air ducts! Please order operating instructions from your specialist EROWA dealer.



ER-062455 MTS+ base plate 410 x 410 P



Version	Base plate, steel, unhardened; set-up distance 250 mm.
Connections	2 lateral pneumatic connections: one for opening, and one for monitoring and reclamping.
Application	To accommodate multiple pallets. For direct assembly on machine tables.
Accessories	Supplied: 2 x ER-014326 threaded connector, straight, Ø 6 2 x ER-002675 plugs, Ø 6 1 x ER-014324 threaded connector, straight, Ø 4 1 x ER-002673 plug, Ø 4 Optional: 1 x ER-063545 nipple, G1/8" 1 x ER-064499 fast coupling
Note	Attachment boreholes can be drilled by customers.
Caution	Do not drill through any air ducts! Please order operating instructions from your specialist EROWA dealer.



EROWA MTS

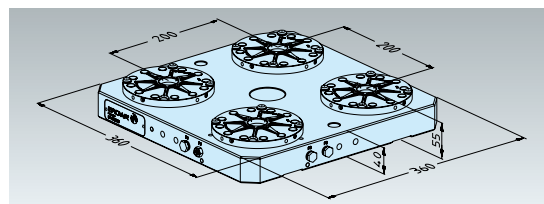
Base plates, 4-fold, with cleaning facility, automatable

Technical data	MTS base plates, 4-fold, with cleaning facility, automatable pneumatic
Repeatability	<0.005 mm
Clamping	Spring tension
Opening pressure	min. 7 bar
Process monitoring	pneumatic
Clamping power	48,000 N (4 x 12,000 N)

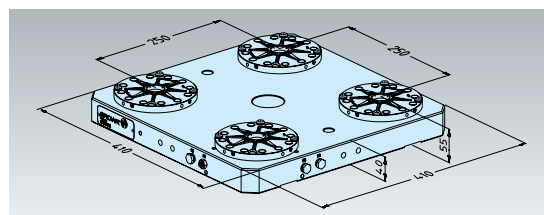
P = pneumatically operated

ER-038300 MTS base plate 360 x 360 P/A

Version	Base plate, steel, unhardened; set-up distance 200 mm.
Connections	Lateral, to open: pneumatic. Lateral to clean: pneumatic.
Application	To accommodate multiple pallets. For direct assembly on machine tables.
Accessories supplied	for ER-038300: 1 x ER-036672, 2 x ER-014326.
Note	Attachment boreholes can be drilled by customers.
Caution	Do not drill through any air ducts! Please order operating instructions from your EROWA dealer.

**ER-038302 MTS base plate 410 x 410 P/A**

Version	Base plate, steel, unhardened; set-up distance 250 mm.
Connections	Lateral, to open: pneumatic. Lateral to clean: pneumatic.
Application	To accommodate multiple pallets. For direct assembly on machine tables.
Accessories supplied	for ER-038302: 1 x ER-036672, 2 x ER-014326.
Note	Attachment boreholes can be drilled by customers.
Caution	Do not drill through any air ducts! Please order operating instructions from your EROWA dealer.



EROWA MTS+

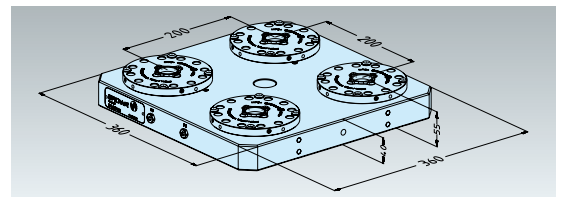
Base plates, 4-fold, with cleaning facility, automatable

Technical data	MTS+ base plates, 4-fold, with cleaning facility, automatable pneumatic	P = pneumatically operated A = automatable
Repeatability	<0.003 mm	
Clamping	Spring tension	
Opening pressure	min. 8.5 bar	
Process monitoring	pneumatic	
Clamping power with reclamping	up to 72,000 N (4 x 18,000 N)	

ER-062456 MTS+ base plate 360 x 360 P/A



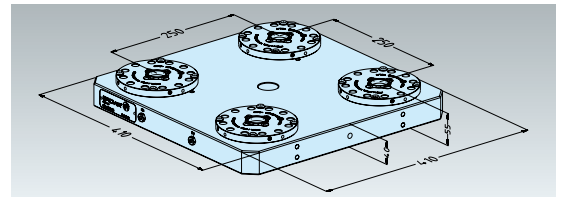
Version	Base plate, steel, unhardened; set-up distance 200 mm.
Connections	2 lateral pneumatic connections: one for opening, and one for cleaning, monitoring and reclamping.
Application	To accommodate multiple pallets. For direct assembly on machine tables.
Accessories	Supplied: 2 x ER-014326 threaded connector, straight, Ø 6 2 x ER-002675 plugs, Ø 6 1 x ER-014324 threaded connector, straight, Ø 4 1 x ER-002673 plug, Ø 4 Optional: 1 x ER-063545 nipple, G1/8" 1 x ER-064499 fast coupling
Note	Attachment boreholes can be drilled by customers.
Caution	Do not drill through any air ducts! Please order operating instructions from your specialist EROWA dealer.



ER-062457 MTS+ base plate 410 x 410 P/A



Version	Base plate, steel, unhardened; set-up distance 250 mm.
Connections	2 lateral pneumatic connections: one for opening, and one for cleaning, monitoring and reclamping.
Application	To accommodate multiple pallets. For direct assembly on machine tables.
Accessories	Supplied: 2 x ER-014326 threaded connector, straight, Ø 6 2 x ER-002675 plugs, Ø 6 1 x ER-014324 threaded connector, straight, Ø 4 1 x ER-002673 plug, Ø 4 Optional: 1 x ER-063545 nipple, G1/8" 1 x ER-064499 fast coupling
Note	Attachment boreholes can be drilled by customers.
Caution	Do not drill through any air ducts! Please obtain operating instructions from your specialist EROWA dealer.



EROWA MTS

Base plates, 6-fold

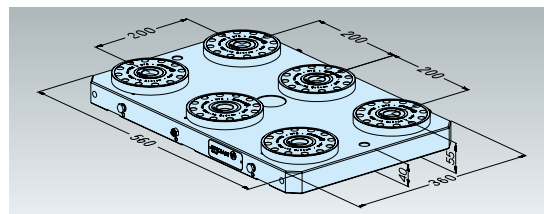
Technical data	MTS base plates, 6-fold pneumatic
Repeatability	<0.005 mm
Clamping	Spring tension
Opening pressure	min. 7 bar
Clamping power	72,000 N (6 x 12,000 N)

P = pneumatically operated

ER-033900 MTS base plate 360 x 560 P



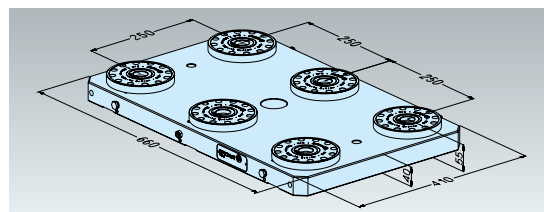
Version	Base plate, steel, unhardened; set-up distance 200 mm.
Connections	Lateral, to open: pneumatic.
Application	To accommodate multiple pallets. For direct assembly on machine tables.
Accessories supplied	1 x ER-036672.
Note	Attachment boreholes can be drilled by customers.
Caution	Do not drill through any air ducts! Please order operating instructions from your EROWA dealer.



ER-033902 MTS base plate 410 x 660 P



Version	Base plate, steel, unhardened; set-up distance 250 mm.
Connections	Lateral, to open: pneumatic.
Application	To accommodate multiple pallets. For direct assembly on machine tables.
Accessories supplied	1 x ER-036672.
Note	Attachment boreholes can be drilled by customers.
Caution	Do not drill through any air ducts! Please order operating instructions from your EROWA dealer.



EROWA MTS+

Base plates, 6-fold

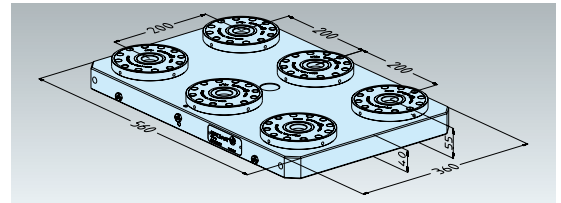
Technical data	MTS+ base plates, 6-fold pneumatic
Repeatability	<0.003 mm
Clamping	Spring tension
Opening pressure	min. 8.5 bar
Process monitoring	pneumatic
Clamping power with reclamping	up to 108,000 N (6 x 18,000 N)

P = pneumatically operated

ER-062458 MTS+ base plate 360 x 560 P



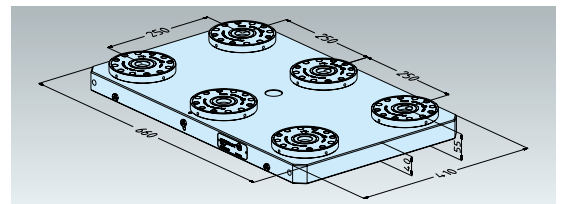
Version	Base plate, steel, unhardened; set-up distance 200 mm.
Connections	Lateral pneumatic connections: for opening, monitoring and reclamping.
Application	To accommodate multiple pallets. For direct assembly on machine tables.
Accessories	Supplied: 2 x ER-014326 threaded connector, straight, Ø 6 2 x ER-002675 plugs, Ø 6 1 x ER-014324 threaded connector, straight, Ø 4 1 x ER-002673 plug, Ø 4 Optional: 1 x ER-063545 nipple, G1/8" 1 x ER-064499 fast coupling
Note	Attachment boreholes can be drilled by customers.
Caution	Do not drill through any air ducts! Please order operating instructions from your specialist EROWA dealer.



ER-062459 MTS+ base plate 410 x 660 P



Version	Base plate, steel, unhardened; set-up distance 250 mm.
Connections	lateral pneumatic connections: for opening, monitoring and reclamping.
Application	To accommodate multiple pallets. For direct assembly on machine tables.
Accessories	Supplied: 2 x ER-014326 threaded connector, straight, Ø 6 2 x ER-002675 plugs, Ø 6 1 x ER-014324 threaded connector, straight, Ø 4 1 x ER-002673 plug, Ø 4 Optional: 1 x ER-063545 nipple, G1/8" 1 x ER-064499 fast coupling
Note	Attachment boreholes can be drilled by customers.
Caution	Do not drill through any air ducts! Please order operating instructions from your specialist EROWA dealer.



EROWA MTS

Base plates, 8-fold

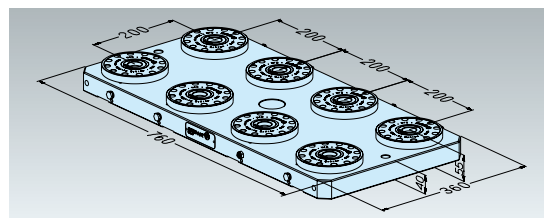
Technical data	MTS base plates, 8-fold pneumatic
Repeatability	<0.005 mm
Clamping	Spring power
Opening pressure	min. 7 bar
Process monitoring	pneumatic
Clamping power	96,000 N (8 x 12,000 N)

P = pneumatically operated

ER-033904 MTS base plate 360 x 760 P



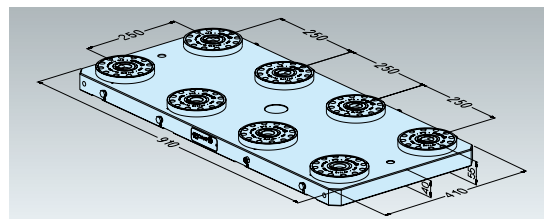
Version	Base plate, steel, unhardened; set-up distance 200 mm.
Connections	Lateral, to open: pneumatic.
Application	To accommodate multiple pallets. For direct assembly on machine tables.
Accessories supplied	1 x ER-036672.
Note	Attachment boreholes can be drilled by customers.
Caution	Do not drill through any air ducts!



ER-033906 MTS base plate 410 x 910 P



Version	Base plate, steel, unhardened; set-up distance 250 mm.
Connections	Lateral, to open: pneumatic.
Application	To accommodate multiple pallets. For direct assembly on machine tables.
Accessories supplied	1 x ER-036672.
Note	Attachment boreholes can be drilled by customers.
Caution	Do not drill through any air ducts! Please order operating instructions from your EROWA dealer.



EROWA MTS+

Base plates, 8-fold

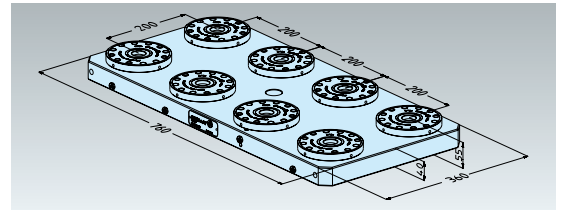
Technical data	MTS+ base plates, 8-fold pneumatic
Repeatability	<0.003 mm
Clamping	Spring tension
Opening pressure	min. 8.5 bar
Process monitoring	pneumatic
Clamping power with reclamping	up to 144,000 N (8 x 18,000 N)

P = pneumatically operated

ER-062460 MTS+ base plate 360 x 760 P



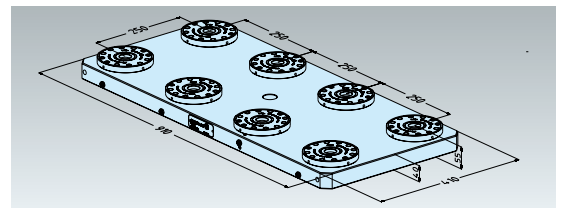
Version	Base plate, steel, unhardened; set-up distance 200 mm.
Connections	lateral pneumatic connections: for opening, monitoring and reclamping.
Application	To accommodate multiple pallets. For direct assembly on machine tables.
Accessories	Supplied: 2 x ER-014326 threaded connector, straight, Ø 6 2 x ER-002675 plugs, Ø 6 1 x ER-014324 threaded connector, straight, Ø 4 1 x ER-002673 plug, Ø 4 Optional: 1 x ER-063545 nipple, G1/8" 1 x ER-064499 fast coupling
Note	Attachment boreholes can be drilled by customers.
Caution	Do not drill through any air ducts! Please order operating instructions from your specialist EROWA dealer.



ER-062461 MTS+ base plate 410 x 910 P



Version	Base plate, steel, unhardened; set-up distance 250 mm.
Connections	lateral pneumatic connections: for opening, for monitoring and reclamping.
Application	To accommodate multiple pallets. For direct assembly on machine tables.
Accessories	Supplied: 2 x ER-014326 threaded connector, straight, Ø 6 2 x ER-002675 plugs, Ø 6 1 x ER-014324 threaded connector, straight, Ø 4 1 x ER-002673 plug, Ø 4 Optional: 1 x ER-063545 nipple, G1/8" 1 x ER-064499 fast coupling
Note	Attachment boreholes can be drilled by customers.
Caution	Do not drill through any air ducts! Please order operating instructions from your specialist EROWA dealer.



EROWA MTS Pallets

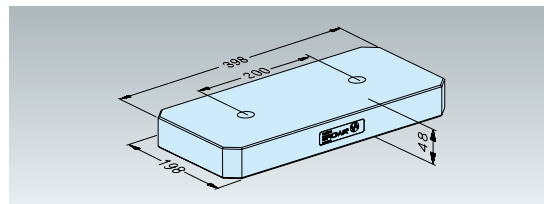
ER-033703 MTS pallet 198 x 398 / 200



Version Aluminum pallet, 2-fold, excluding chucking spigot (MTS chucking spigot set ER-041460).

Application To clamp workpieces, vises and gauges.

Accessories ER-041460 to be ordered separately.



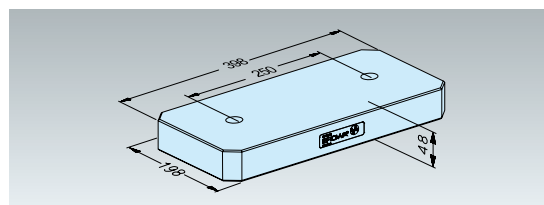
ER-041781 MTS pallet 198 x 398 / 250



Version Aluminum pallet, 2-fold, excluding chucking spigot (MTS chucking spigot set ER-041460).

Application To clamp workpieces, vises and gauges.

Accessories ER-041460 to be ordered separately.



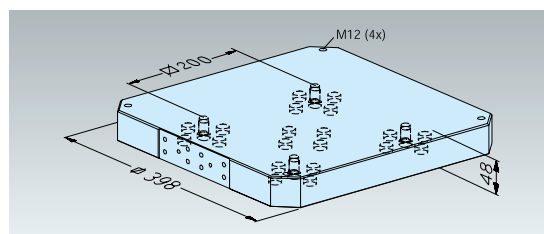
ER-038014 MTS pallet 398 x 398 / 200



Version Cast aluminum pallet, 4-fold, excluding chucking spigot (MTS chucking spigot set ER-041461 (M) / ER-041464 (A)).

Application To clamp workpieces, vises and gauges.

Accessories ER-041461 (M) / ER-041464 (A) to be ordered separately.



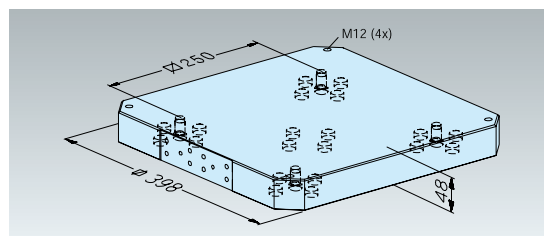
ER-038002 MTS pallet 398 x 398 / 250



Version Cast aluminum pallet, 4-fold, excluding chucking spigot (MTS chucking spigot set ER-041461 (M) / ER-041464 (A)).

Application To clamp workpieces, vises and gauges.

Accessories ER-041461 (M) / ER-041464 (A) to be ordered separately.



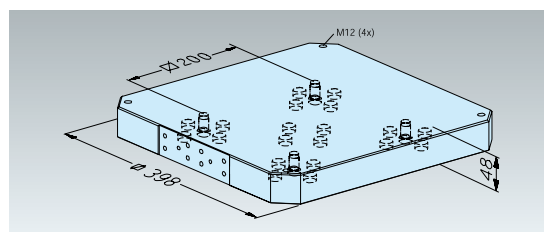
ER-038376 MTS pallet 398 x 398 / 200 Hard Z support

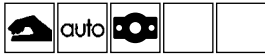


Version Aluminum pallet, 4-fold, excluding chucking spigot (MTS chucking spigot set ER-041461 (M) / ER-041464 (A)).

Application To clamp workpieces, vises and gauges.

Accessories ER-041461 (M) / ER-041464 (A) to be ordered separately.

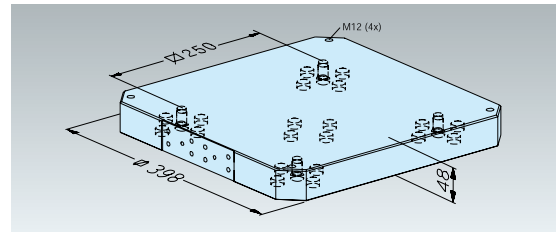


**ER-038374 MTS pallet 398 x 398 / 250
Hard Z support**

Version Aluminum pallet, 4-fold, excluding chucking spigot (MTS chucking spigot set ER-041461 (M) / ER-041464 (A)).

Application To clamp workpieces, vises and gauges.

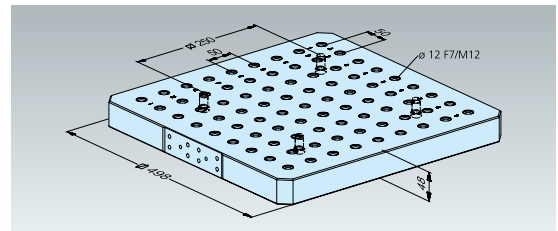
Accessories ER-041461 (M) / ER-041464 (A) to be ordered separately.

**ER-044906 MTS Pallet 498 x 498/250 R50**

Version Cast aluminum pallet (hard anodized), 4-fold, excluding chucking spigot (MTS chucking spigot set ER-041461 (M) / ER-041464 (A)).

Application To clamp workpieces, vises and gauges.

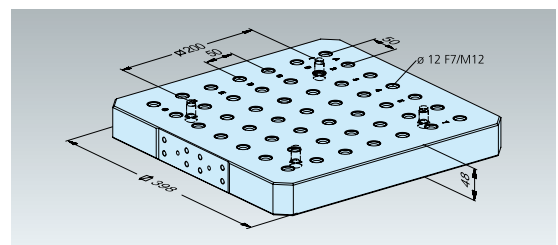
Accessories ER-041461 (M) / ER-041464 (A) to be ordered separately.

**ER-058819 MTS Pallet 398 x 398/200 R50**

Version Cast aluminum pallet (hard anodized), 4-fold, excluding chucking spigot (MTS chucking spigot set ER-041461 (M) / ER-041464 (A)).

Application To clamp workpieces, vises and gauges.

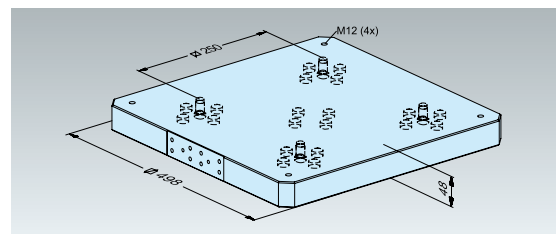
Accessories ER-041461 (M) / ER-041464 (A) to be ordered separately.

**ER-048314 MTS Pallet 498 x 498 / 250**

Version Cast aluminum pallet, 4-fold, excluding chucking spigot (MTS chucking spigot set ER-041461 (M) / ER-041464 (A)).

Application To clamp workpieces, vises and gauges.

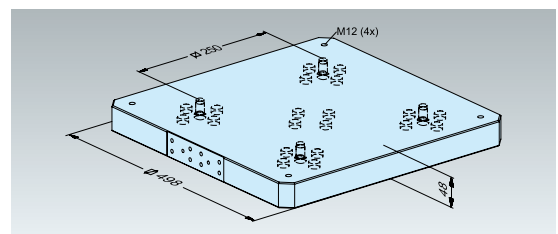
Accessories ER-041461 (M) / ER-041464 (A) to be ordered separately.

**ER-048315 MTS Pallet 498 x 498 / 250
Hard Z support**

Version Cast aluminum pallet, 4-fold, excluding chucking spigot (MTS chucking spigot set ER-041461 (M) / ER-041464 (A)).

Application To clamp workpieces, vises and gauges.

Accessories ER-041461 (M) / ER-041464 (A) to be ordered separately.



EROWA MTS / MTS 81

Pallets

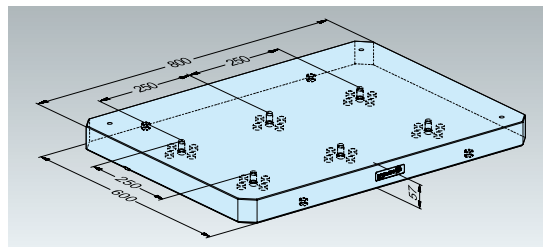
ER-054981 MTS pallet 600 x 800 x 57 / 250 hard Z support



Version Cast aluminum pallet, 6-fold, excluding chucking spigot (MTS chucking spigot set ER-054710(A), ER-041462 (M)).

Application To clamp workpieces, vises and gauges, for chip-cutting operations

Accessories To be ordered separately ER-054710(A), ER-041462 (M).



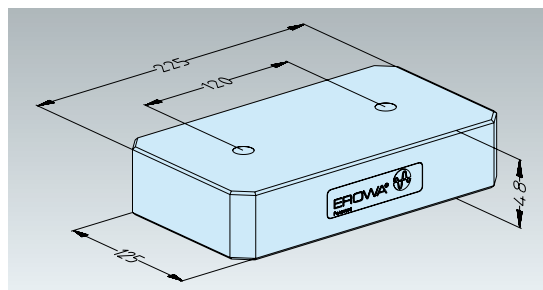
ER-063138 MTS 81 pallet 125 x 225 / 120 hard Z support 2-fold



Version Aluminum pallet, double, excluding chucking spigots (MTS chucking spigot set ER-041460). Hard Z-supports.

Application To clamp workpieces, vises and gauges.

Accessories ER-041460 to be ordered separately.



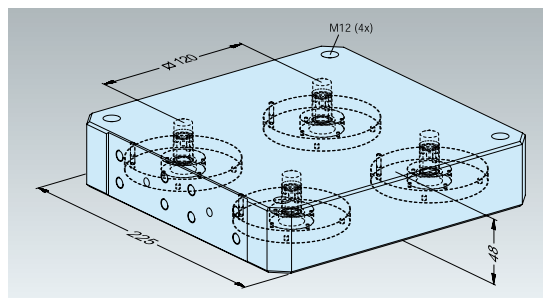
ER-065209 MTS 81 pallet 225 x 225 / 120 hard Z support



Version Aluminum pallet, excluding chucking spigots (MTS chucking spigot set ER-041461 (M) / ER-041464 (A). Hard Z-supports.

Application To clamp workpieces, vises and gauges.

Accessories ER-041461 (M) / ER-041464 (A) to be ordered separately.



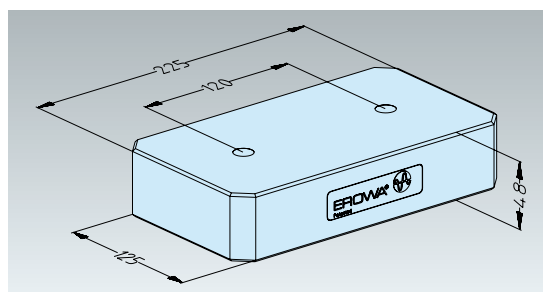
ER-063139 MTS 81 pallet 125 x 225 / 120 2-fold



Version Aluminum pallet, double, excluding chucking spigots (MTS chucking spigot set ER-041460). Hard Z-supports.

Application To clamp workpieces, vises and gauges.

Accessories ER-041460 to be ordered separately.



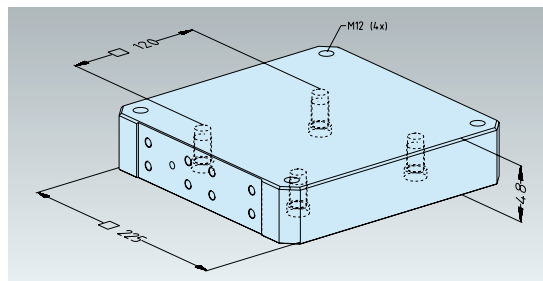
ER-063140 MTS 81 pallet 225 x 225 / 120 4-fold



Version Aluminum pallet, 4-fold, excluding chucking spigots (MTS chucking spigot set ER-041461 (M) / ER-041464 (A). Hard Z-supports.

Application To clamp workpieces, vises and gauges.

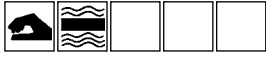
Accessories ER-041461 (M) / ER-041464 (A) to be ordered separately.



EROWA MTS

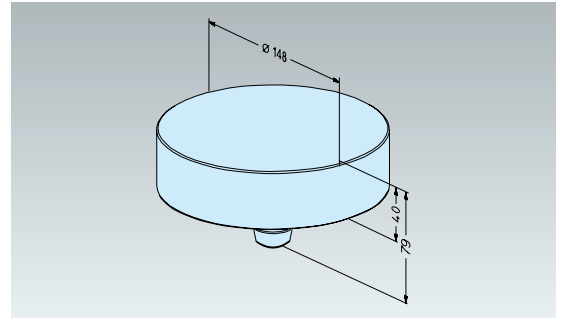
Single pallets

ER-033602 MTS pallet P ø 148 Alu

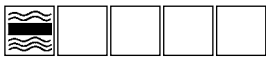


Version Aluminum pallet, fitted with centering plate ER-033600, including chucking spigot ER-039200.

Application To clamp workpieces and gauges. For manual handling.



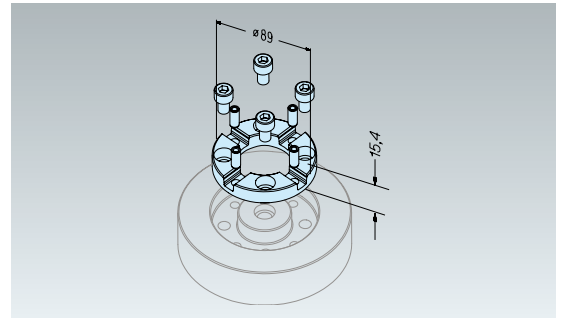
ER-033600 MTS centering plate P



Version Steel, including attachment bolts and positioning pins.

Application For the production of customized and indexable MTS pallets.

Accessories Chucking spigot ER-039200 to be ordered separately.



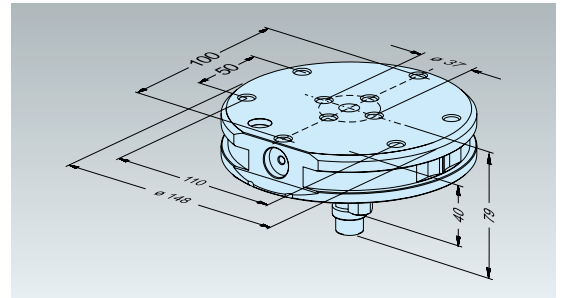
ER-041928 MTS pallet P ø 148 Inox



Version Steel pallet, not hardened, including chucking spigot ER-040999. Centering segment integrated in the pallet body.

Application To clamp workpieces and gauges. For manual handling and automatic operation.

Note Compatible with EROWA PC210 CombiChuck and Power-Chuck P (ITS chucking spigot ER-010742 required).

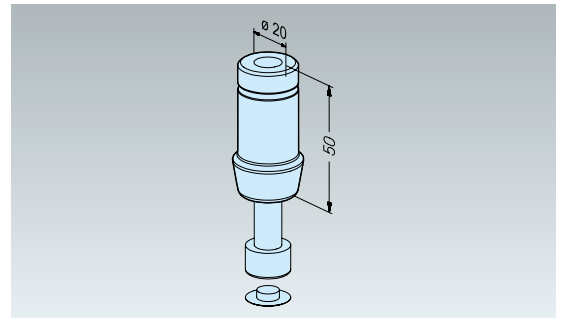


ER-040999 MTS chucking spigot P



Version One chucking spigot, including attachment bolt and protective cap.

Application For the conversion of ITS pallet ø 148 ER-041912 into MTS pallet P ø 148 ER-041928.



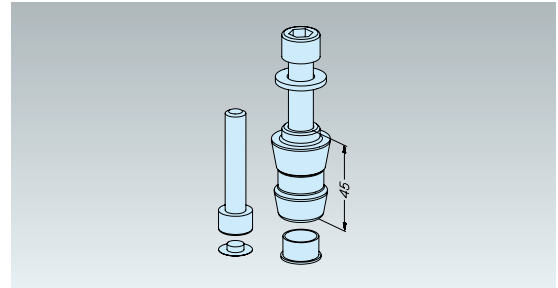
EROWA MTS

Chucking spigots

ER-033800 MTS centering spigot



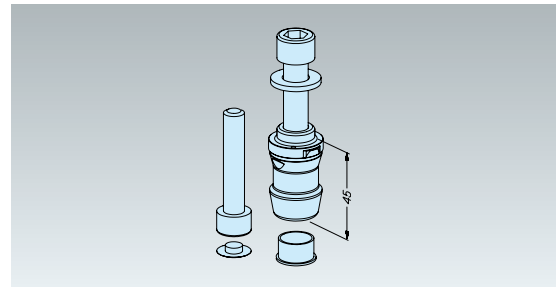
Version One chucking spigot with centering function (without play), including attachment bolts (M10x50, M12x55), U-disc and protective caps.



ER-039201 MTS compensation spigot / A



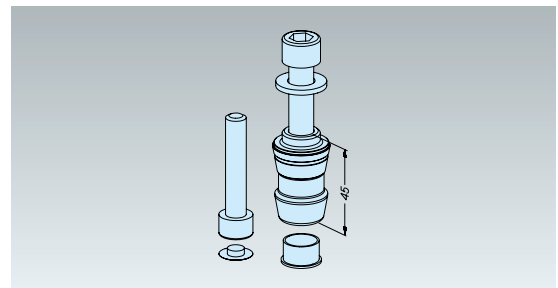
Version One chucking spigot with compensation function, including attachment bolts (M10x50, M12x55), U-disc and protective caps.



ER-039200 MTS chucking spigot / A



Version One chucking spigot without centering (centering play 0.1mm), including attachment bolts (M10x50, M12x55), U-disc and protective caps.

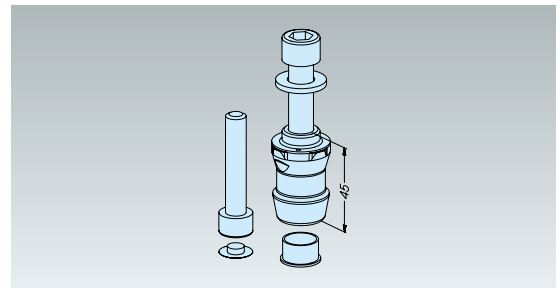


ER-038000 MTS centering spigot / A



Version One chucking spigot with centering function, including attachment bolts (M10x50, M12x55), U-disc, O-ring and protective caps.

Application For MTS pallets which are loaded/unloaded automatically. The centering spigot defines the datum point without play and closes the cleaning boreholes in the MTS Chucks / A.



ER-033800 MTS centering spigot
ER-038000 MTS centering spigot / A
 The **centering spigot** defines the datum point (free of play).

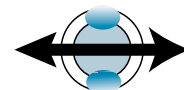


ER-039200 MTS chucking spigot / A
 (centering play 0.1 mm).



ER-039201 MTS compensation spigot / A
 The **compensation spigot** positions the pallet in one axis only (X or Y) and is capable of compensating for a maximum set-up distance difference of 0.1 mm.

Centering surfaces



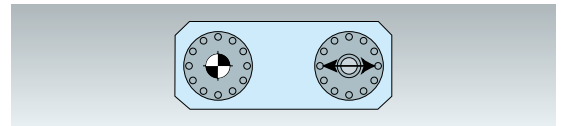
EROWA MTS

Chuckling spigot set

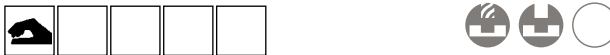
ER-041460 MTS chucking spigot set 2



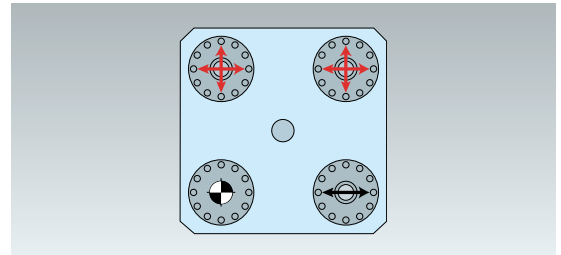
Version 1 centering spigot, 1 compensation spigot / A.
Mounting With the bolts supplied through the pallet or through the chucking spigot.



ER-041461 MTS chucking spigot set 4



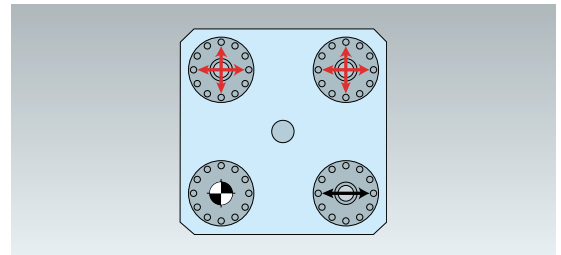
Version 1 centering spigot, 1 compensation spigot / A,
2 chucking spigots / A.
Mounting With the bolts supplied through the pallet or through the chucking spigot.



ER-041464 MTS chucking spigot set 4 / A



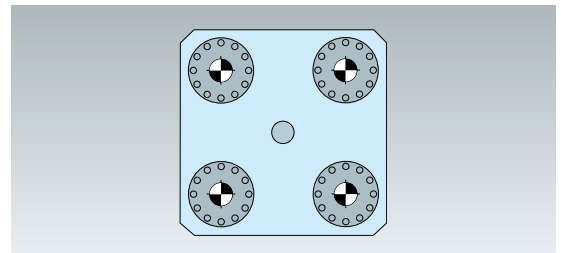
Version 1 centering spigot / A, 1 compensation spigot / A,
2 chucking spigots / A.
Mounting With the bolts supplied through the pallet or through the chucking spigot.



ER-062465 MTS centering spigot set 4 / A



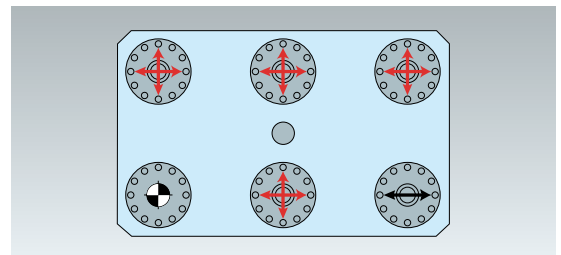
Version 4 centering spigots / A-Z.
Application Basically for 5-axis machining.
To fit With the bolts supplied, through the pallet, or through chucking spigots.



ER-041462 MTS chucking spigot set 6



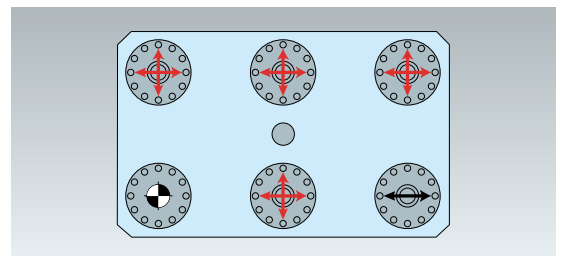
Version 1 centering spigot, 1 compensation spigot / A,
4 chucking spigots / A.
Mounting With the bolts supplied through the pallet or through the chucking spigot.



ER-054710 MTS Chucking spigot set 6/A



Version 1 centering spigot / A, 1 compensation spigot / A,
4 chucking spigots / A.
Mounting With the bolts supplied through the pallet or through the chucking spigot.



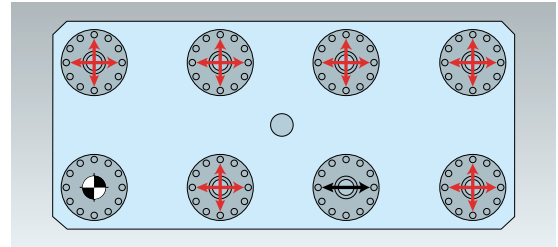
EROWA MTS

Chucking spigot set

ER-041463 MTS chucking spigot set 8



- Version 1 centering spigot, 1 compensation spigot / A,
6 chucking spigots / A.
- Mounting With the bolts supplied through the pallet or
through the chucking spigot.



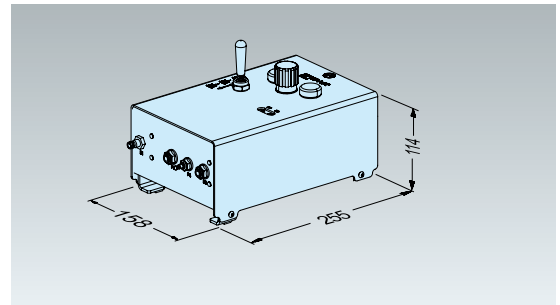
EROWA MTS

Operation

ER-073872 Manual control unit with booster



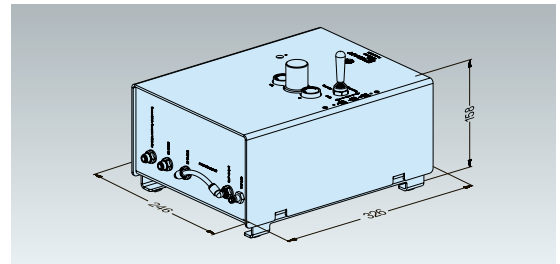
- Version Manual valve to control the EROWA chucks:
Opening/Reclamping/Cleaning.
- Application Operation of: EROWA ITS Compact Combi Chuck, ITS,
UPC, MTS, PC 210 chucks and PowerChuck P.
- Note Integrated booster with load ratio 1:2 (up to output
pressure of 10 bar max.).



ER-064006 MTS+ Manual control unit monitored with booster



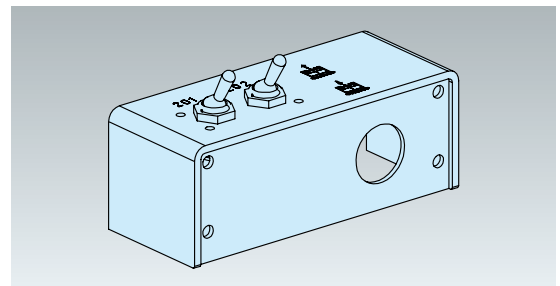
- Version Manual valve to control the MTS+ chucks:
Opening/Reclamping/Cleaning/Monitoring.
LED status displays for up to 8 chuck at the same time.
- Application Operation of MTS+ chucks.
- Note Integrated booster with load ratio 1:2 (up to output
pressure of 10 bar max.).



ER-039466 Additional valve double



- Version For mounting to the manual control units ER-008988 and
ER-073872, incl. set of hoses.
- Application Operating of two separate chucks with one single control
unit.



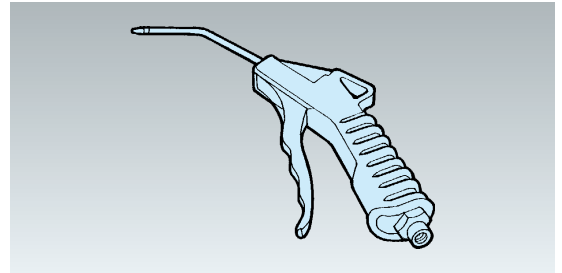
EROWA MTS

Operation

ER-001846 Air jet



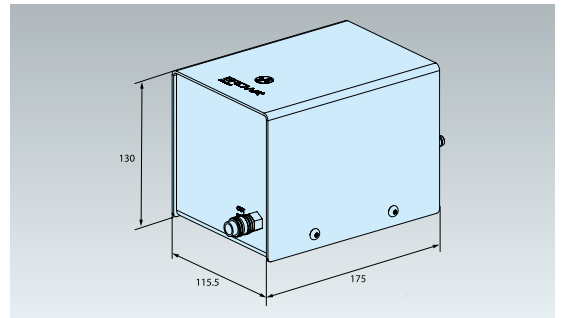
Version Plastic, smooth regulation of air flow, connection 1/4", inside thread.
 Application Operation of manual chucks.
 Note Not suitable for operating MTS+ and MTS81.



ER-074893 Pressure booster



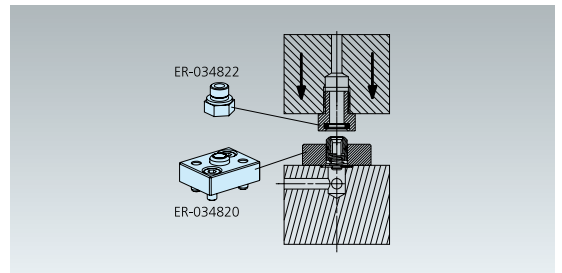
Version Quick-connect couplings for hose $\varnothing i = 8$ mm. Compression ratio: 1:2
 Application On insufficient system pressure and on pressure fluctuations.
 Installation Integrate in air circuit near application.



ER-034820 MTS air coupling

ER-034822 MTS air coupling pallet 1 piece

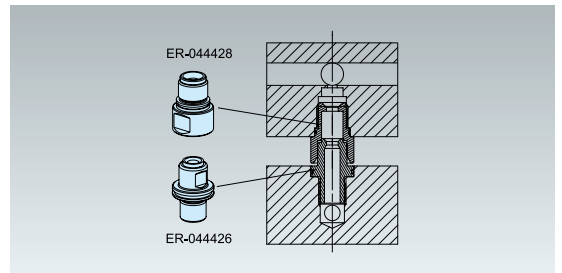
Application The MTS air coupling ER-034820 combined with the MTS air coupling ER-034822 serves as a pneumatic interface between MTS base plates (A) and MTS pallets (B).
 For use with compressed air.
 Working pressure max. 10 bar.



ER-044426 Nipple for MTS base plates

ER-044428 Coupling for MTS pallets

Application The coupling for MTS pallets ER-044428, in combination with the nipple for MTS base plates ER-044426, serves as an interface for the medium connection between MTS base plates (A) and MTS pallets (B).
 For use with compressed air,
 with vacuum,
 with oil.
 Working pressure max. 200 bar.
 Important Docking- and undocking only depressurized.



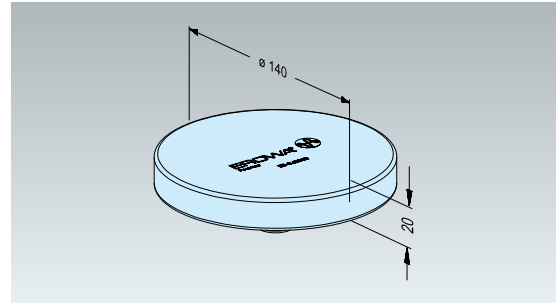
EROWA MTS

Accessories

ER-042038 MTS cover

Version Aluminum cover, anodized. Suitable for MTS and MTS+ chucks.

Application Protects MTS and MTS+ chucks that are not in use from chips and coolant.

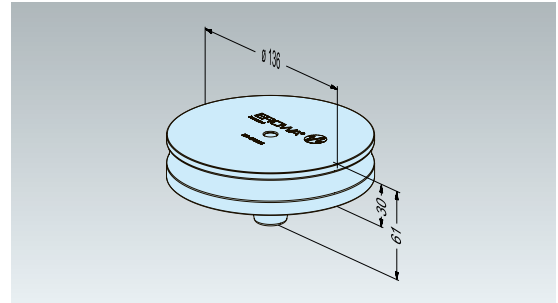


ER-070064 MTS+ Sealing pallet ø 136



Version Rust-resistant cover for the hermetical sealing of MTS+ chucks that are not in use.

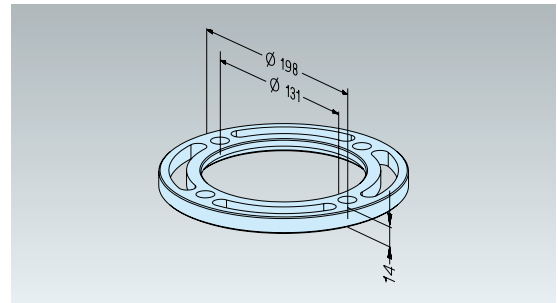
Note Support surface must be clean and must be protected against damage.



ER-033804 MTS ring bracket

Version Bracket made of steel, excluding attachment bolts.

Application Suitable for MTS chucks only. To attach mounted MTS chucks to the machine table.

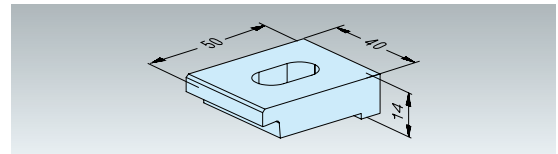


ER-033805 MTS bracket 1 piece

Version Bracket made of steel, excluding attachment bolt.

Application To attach MTS chucks onto the machine table.

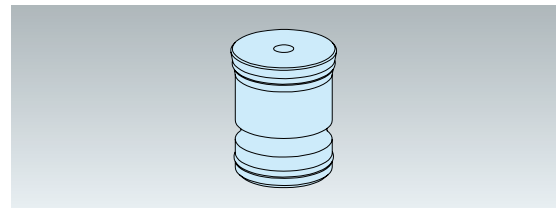
Note Four brackets are necessary per MTS chuck.



ER-037967 MTS Locking bolt with M6

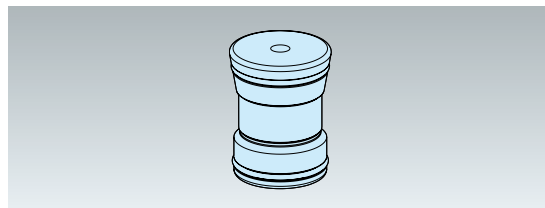
Version Steel.

Application To plug the central borehole in MTS and MTS 81 chucks.

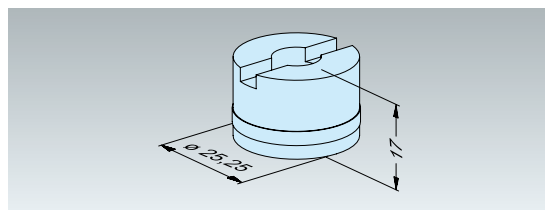


ER-073168 MTS+ stopper

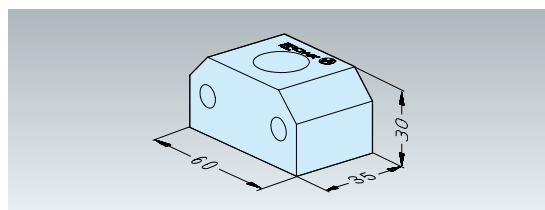
Version Steel.
Application To plug the central borehole in all the MTS+ chucks.


ER-067563 Rubber seal MTS ø25.25 x 17 for EDM

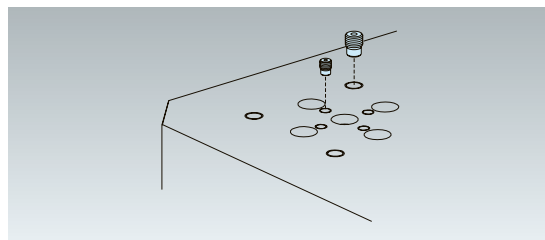

Version Rubber seal
Note Assembly according to operating instructions. Prevents liquid from penetrating from below.


ER-034168 MTS Connector block 1/8" double

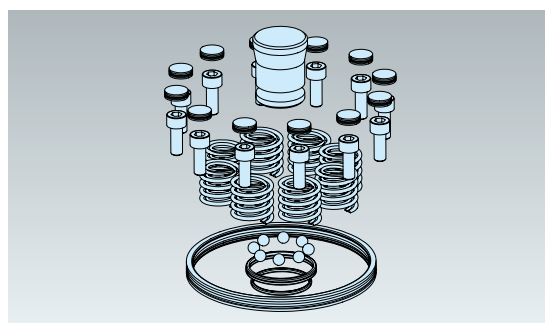
Version Connector block made of steel, excluding attachment bolts.
Application To receive pneumatic and hydraulic threaded connectors, nipples and couplings.


ER-060391 MTS Set Z-support bolt set for 4-part pallet

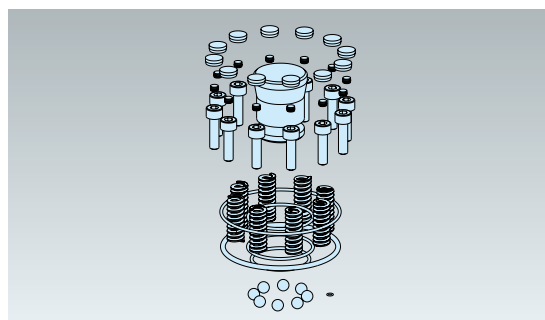

Version Steel, hardened
Application The Z-support bolts (1, 2) serve as Z-support surface for custo-mized MTS pallets.


ER-034382 MTS repair set pneumatic

Version All the wearing parts for pneumatic MTS chucks.
Application As a repair set or for the conversion of hydraulic MTS chucks into pneumatic ones.
Note Repair or conversion according to instruction manual supplied.


ER-061558 MTS 81 Repair Kit


Application Repair Kit
Version All the wearing parts for MTS IntegralChuck ø 81 M-P (ER-057943) and MTS IntegralChuck ø 81 M-P/A (ER-059016).



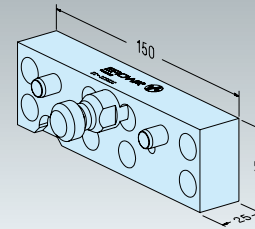
EROWA MTS

Accessories

ER-038622 MTS GripperLink Rapid



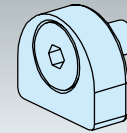
Version Coupling for MTS pallets, mounting accessories included.
Application Suited for MTS pallets to be used on EROWA handling devices with the RCS coupling system.



ER-035294 EWIS™ Rapid chip with chip holder RCS with chip $\varnothing 12,4 \times 2\text{mm}$



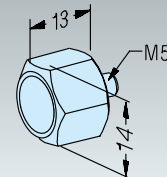
Version Holder with built-in datacarrier.
Application To build into RCS coupling, PalletSet W holder and Basic WEDM holder.



ER-035154 EWIS™ Rapid chip with chip holder SW14 with chip $\varnothing 12,4 \times 2\text{mm}$



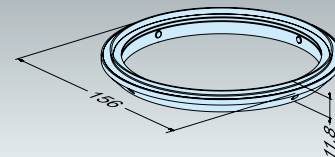
Version Sleeve fitting with built-in datacarrier.
Application In any EROWA electrode holder and pallet which has been prepared for it.



ER-048478 MTS Chip guard low



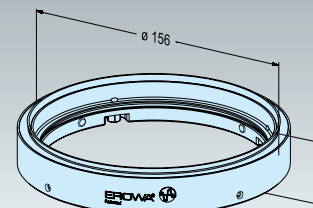
Version Aluminum, anodized
Application The MTS chip guard serves to seal the automatic MTS chucks and base plates when MTS pallets are used.
Note The MTS chip guard low cannot be combined with the MTS pallet P $\varnothing 148$ Inox, ER-041928.



ER-056879 MTS Chip guard $\varnothing 156$ with axial deaeration

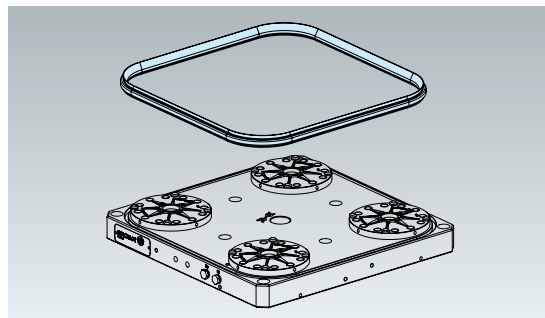


Application For use with MTS pallet P $\varnothing 148$. Prevents dirt and chips from penetrating into the MTS SingleChuck

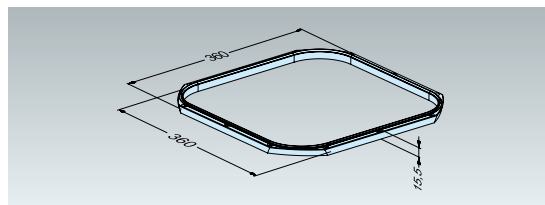


**ER-071604 MTS seal /250
for MTS base plate 410 x 410 mm**

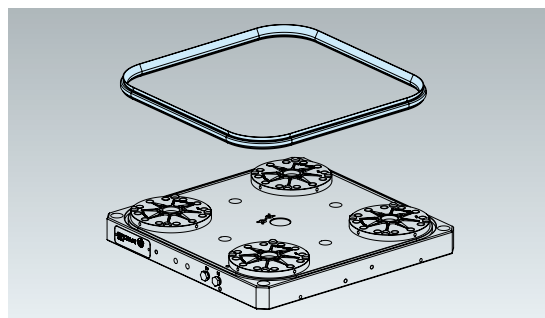

Version FPM (Viton)
Application Prevents dirt from penetrating into MTS base plates 410 x 410 with the use of EROWA MTS pallets 398 x 398 / 250 and 498 x 498 / 250.


ER-049041 MTS seal frame set / 200

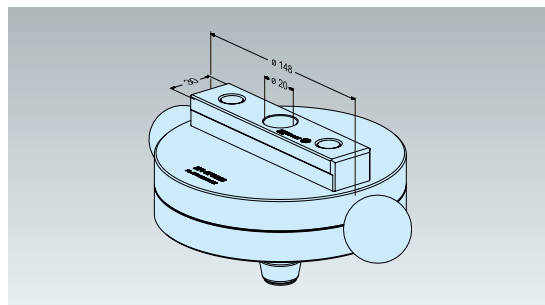

Version Aluminum anodized, with seal FPM (Viton).
Application The MTS seal frame set serves to protect MTS chucks against dirt and liquids when in use with an EROWA MTS pallet.


**ER-075393 MTS seal / 200
for MTS base plate 360 x 360 mm**

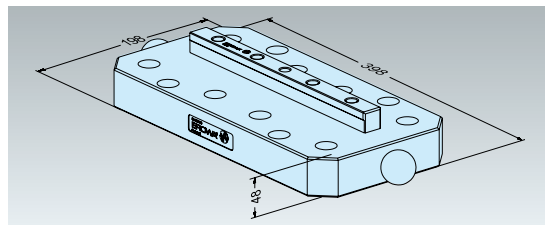

Version FPM (Viton).
Application Prevents dirt from penetrating into MTS base plates 360 x 360 in combination with MTS pallets 398 x 398 / 200.
Note The MTS base plate must have, or be equipped with, the groove (A) to accommodate the seal.


**ER-078823 MTS Alignment pallet P ø 148
for MTS single chuck**


Version Pallet ø 148 mm, center borehole ø 20 mm.
Application Alignment of radial, axial and angular position of MTS single chucks.


ER-037870 MTS Alignment pallet / 200
ER-037875 MTS Alignment pallet / 250


Version Twin aluminium pallet with precision ground alignment rail.
Application Alignment of MTS chucks.
Raillength ER-037870 = 200 mm.
Raillength ER-037875 = 250 mm.



EROWA MTS

Accessories

ER-014326 Straight threaded connector 3101 06 10

Application Pneumatic.



ER-002814 Angled connector

Application Pneumatic.



ER-014366 Threaded T-connector 3198 06 10

Application Pneumatic.



ER-014333 T-connector

Application Pneumatic.



ER-034095 Cross-connector

Application Pneumatic.



ER-002023 Tube 6/4 black

Application Pneumatic. Max. operating pressure: 9 bar.
Order unit Meters.



ER-036672 MTS air jet valve

Application Pneumatic. For air jet ER-001846.



ER-002147 Reinforced pipe PMAFlex Co-Flex divisible

Application Hydraulic and pneumatic. Protects tubes ER-033495 and ER-002023 from damage.
Order units Meter.



ER-034098 Reduction nipple G1/4" - G1/8"

Application Hydraulic and pneumatic.

**ER-034372 Reduction bushing IG1/8" - IG1/4"**

Application Hydraulic and pneumatic.

**ER-034373 Reduction bushing IG 1/8" - IG 1/8"**

Application Hydraulic and pneumatic.

**ER-034375 Reduction nipple AG 1/4" - IG 1/8"**

Application Hydraulic and pneumatic.

**ER-001617 Threaded plug 1/8"**

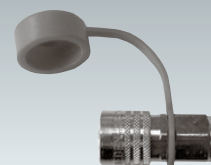
Application Hydraulic and pneumatic.

**ER-033504 Nipple 1/8"**

Application Hydraulic. With blocking device. Fits fast coupling ER-033499.

**ER-033499 Rapid-action coupling 1/8" IG**

Application Hydraulic. With blocking device. Fits fast nipple ER-033504.



The next step

Important things need to be planned. And your next step is certainly among the important things. For it is your start into a new, efficient era. We are pleased to be with you on the way. As consultants, in practice. For you to know at all times what you're engaging in. The next EROWA branch office is not far – **take the step.**



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