



General Catalog

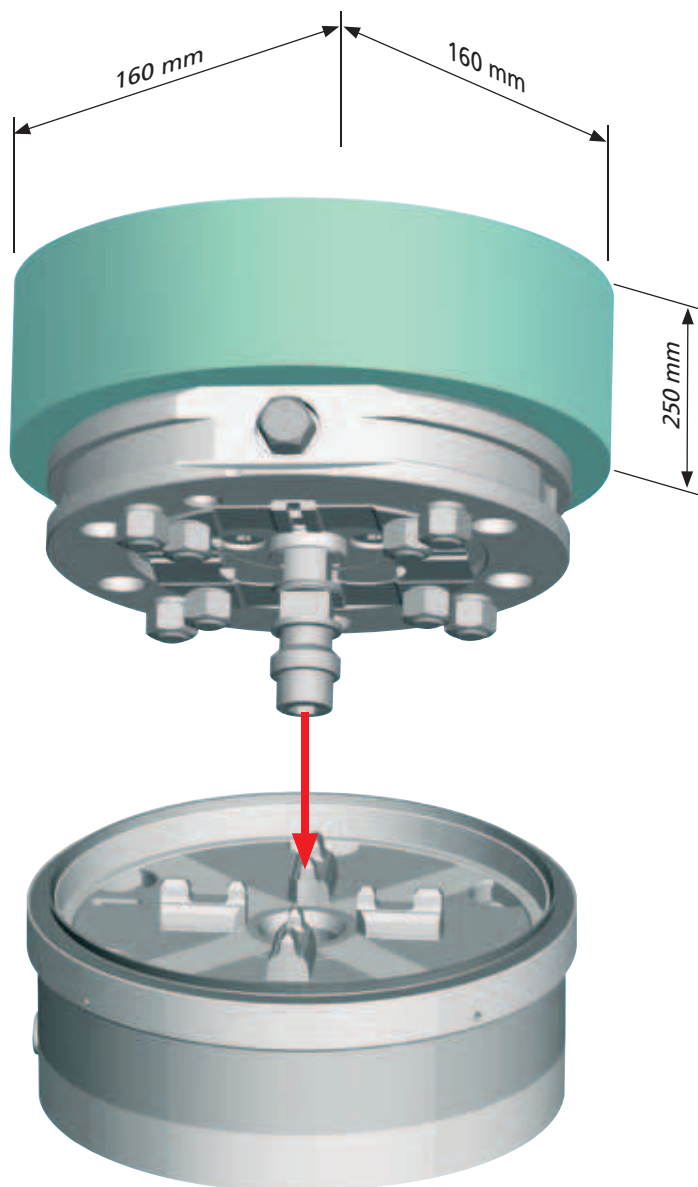
Unlocking the full potential
of your machines



EROWA PowerChuck P

Accessible from all sides

EROWA PowerChucks are quick and easy to integrate on a wide variety of machining centers.



- Whether affixed to the T-slot table or built into the integrated axis, there is always a good solution.
- Access from all five open sides is particularly important with horizontal machining. The low height of the chuck plays a significant role on smaller machines.
- Operation is manual with an air jet, or with one of the pneumatic control units through the permanently screwed-in connections.
- In automatic operation, the presence and proper position of the pallets in the chuck is monitored (EROWA standard). Support surfaces are automatically cleaned.
- The different variants enable the chuck to be optimally fitted to the existing machine base.

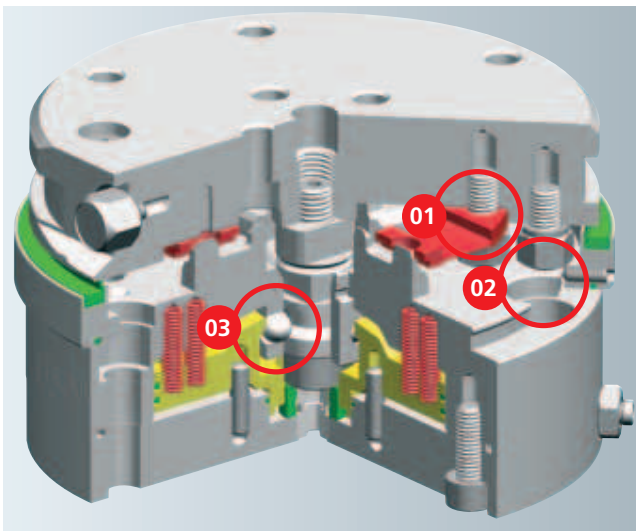
Applications



Handling

Manual / Loading facility / Robot

Function



01 | Centering plates

The G-centering plates with their ground centering slots and their 0.7-mm-thick spring plate ensure clean and powerful poitioning.

02 | Cleaning

During the clamping process, the contact surfaces of the supports are cleaned with compressed air.

03 | Ball lock

The self-locking ball lock generates a clamping power of 10,000 N; full clamping power is even retained in the case of a pressure failure.

Technical data - PowerChuck P

	PowerChuck P
Pallet size	ø 115 mm, ø 148 mm and ITS 50
Chuck dimensions H x ø	H = 51 mm x ø 156 mm
System height (chuck and pallet)	H = 91 mm
Recommended workpiece size	up to 160 x 160 x 250 mm
Repeatability	0.002 mm
Indexing	4 x 90°
Clamping power	10,000 N
Generated by	springs
Release	compressed air, min. 6 bar
Operation	control unit or air jet

EROWA PowerChuck P in action

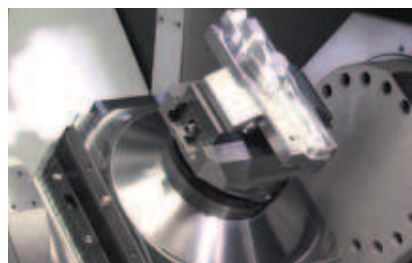
Powerful, flexible, universally applicable

Manufacturing is virtually inconceivable anymore without PowerChucks. Whether on milling or drilling machines, whether on profile-grinding or surface-grinding machines, whether on spindles of dividing heads or lathes: wherever it is, they fit like a glove.

Downtimes are completely eliminated by integrating a consistent clamping system on all machine tools.

CLEAN

**By automatic cleaning of
the contact surfaces.**



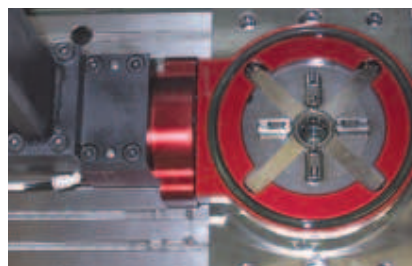
Horizontal chuck on a dividing head.



Flexible and automatic loading of a machine tool with an EROWA handling unit. The ratio of productive hours is considerably increased.



Universal combination of EROWA clamping systems with automatic handling.



Gaskets protect the chucks and ensure secure automatic loading.



Securely clamped also for heavy machining.



We would like to advise you. Please describe your clamping problem to us.



Clamped with μm -accuracy with one movement of the hand.



Practical clamping elements for universal operation.



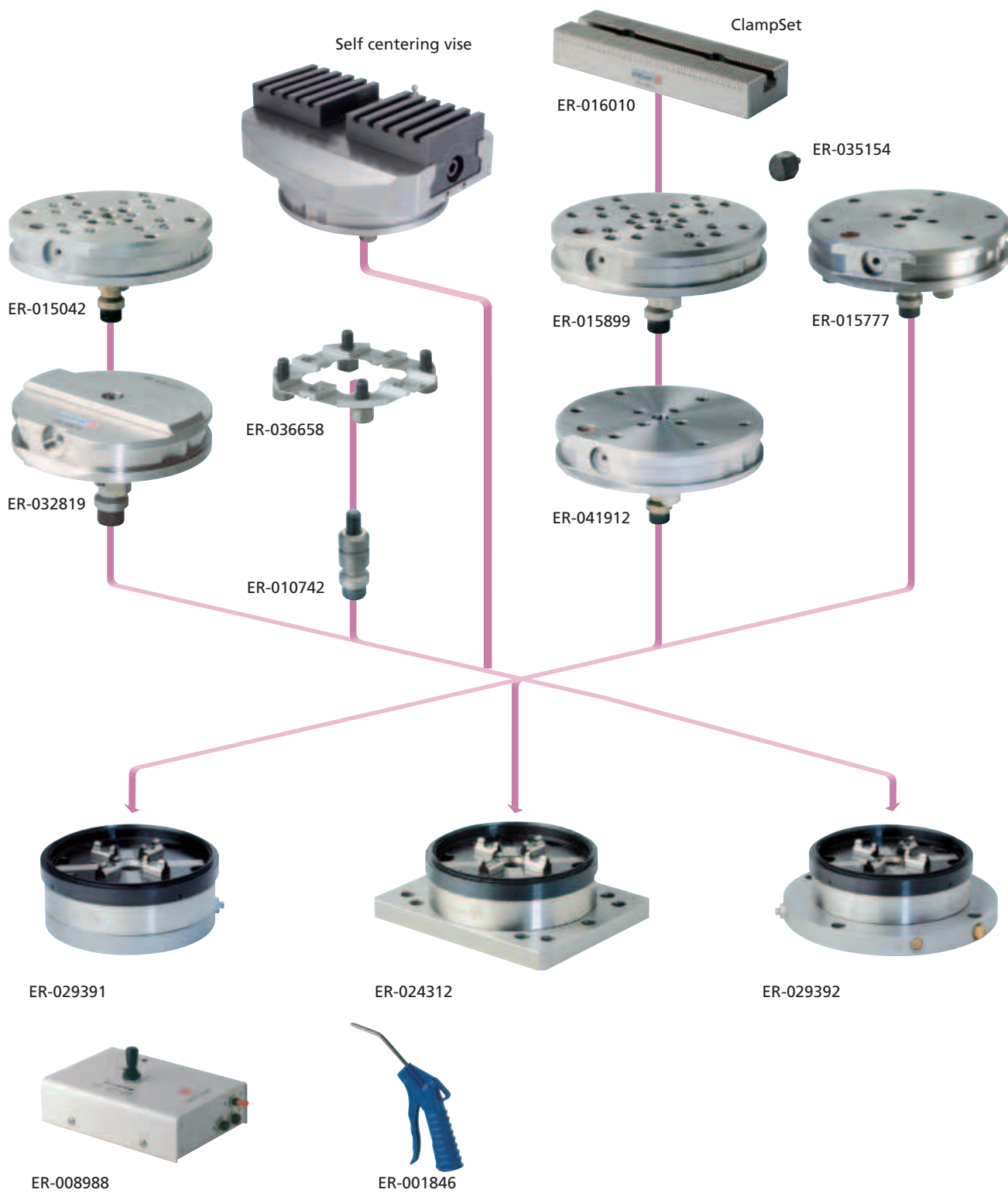
Grinding or milling: EROWA PowerChucks are just right.



Prepare, clamp and complete the job.



















EROWA PowerChuck P Palletizing system The components






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:



EROWA POWERCHUCK P PALLETIZING SYSTEM

-  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

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-  For chip-removing processes
-  For EDM sinking
-  For WEDM

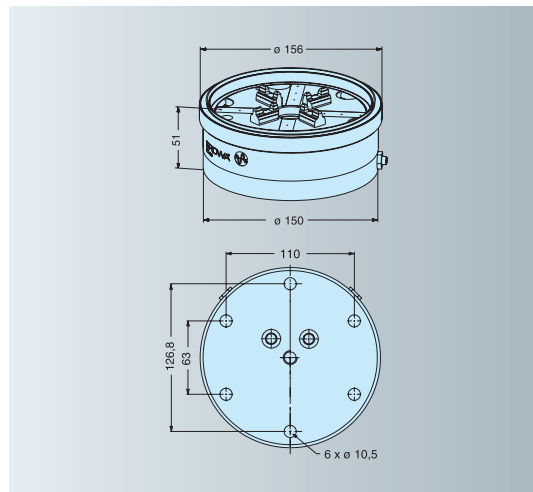
EROWA PowerChuck P Chucks

Technical data	PowerChuck P
Repeatability	0.002 mm
Pallet indexation	4 x 90°
Clamping power	10,000 N
Generated by	spring power
Opening with compressed air	min. 6 bar

ER-029391 PowerChuck P ø 150



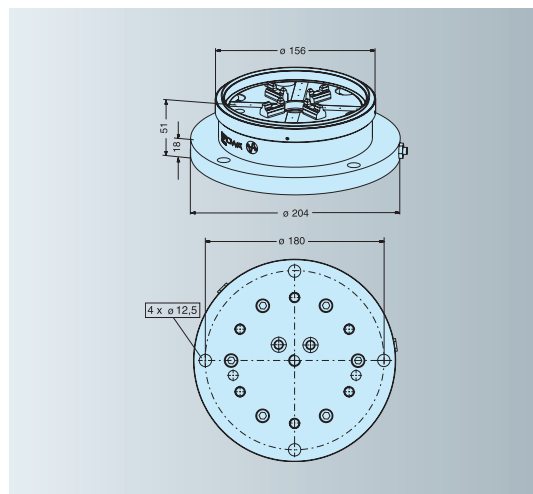
- Version Extra-flat version. Height 51 mm.
Base plate ø 150 mm.
- Connections On the side or at the rear with two lines.
- Operation With airjet, laterally. With control unit through the two lines on the side and at the rear.



ER-029392 PowerChuck P ø 204



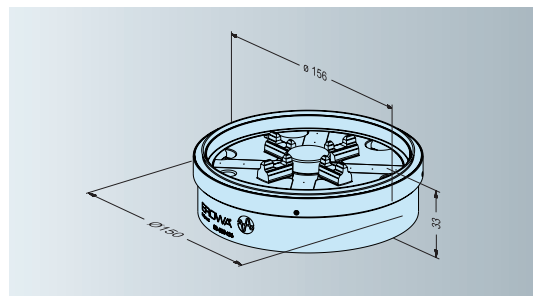
- Version Extra-flat version. Height 51 mm.
Base plate ø 204 mm.
- Connections On the side or at the rear with two lines.
- Operation With airjet, laterally. With control unit through the two lines on the side and at the rear.



ER-029436 PowerChuck P without base plate



- Version Extra flat version. Height 33 mm. Without base plate.
- Connections At the rear according the instruction manual.
- Operation Pneumatically.



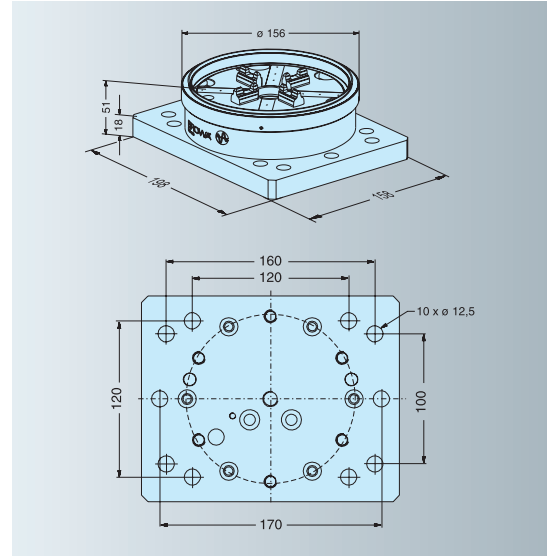
ER-024312 PowerChuck P 158 x 198



Version Extra-flat version. Height 51 mm.
Base plate 158 mm x 198 mm.

Connections On the side or at the rear with two lines.

Operation With airjet, laterally. With control unit through the two lines on the side and at the rear.



ER-044310 PowerChuck P 158 x 230

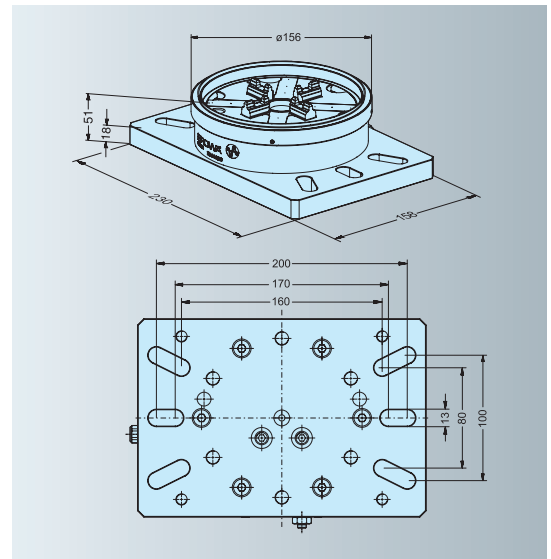


Version Extra-flat version. Height 51 mm.
Base plate 158 mm x 230 mm.

Connections On the side or at the rear with two lines.

Operation With airgun on the side. With control unit through the two lines on the side or at the rear.

Information The borehole pattern of this plate fits 40mm and 50mm T-slot distances.



ER-029422 PowerChuck P / R

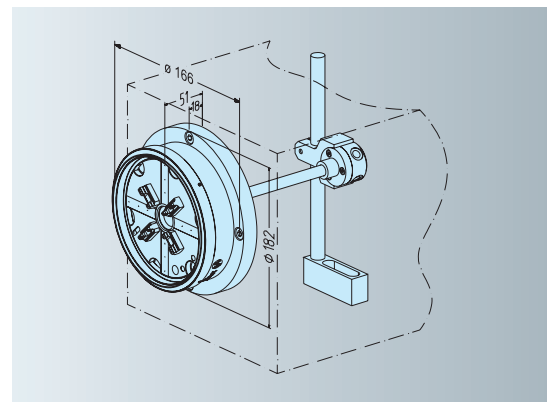


Version PowerChuck P with rotatable connection, max. 50 rpm.

Connections Two lines to the rotatable connection.

Operation With control unit, manually and automatically.

Application For use on dividing heads and round tables.



EROWA PowerChuck P

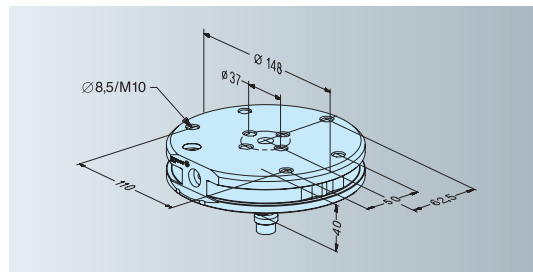
Workpiece carriers

ER-015777 Pallet \varnothing 148 G EWIS™

ER-032732 Pallet kit G \varnothing 148 EWIS™
4 pieces

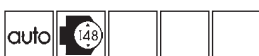


Version Standard type, ground centering plates.
Application To accommodate workpieces and fixtures in chip-cutting machining processes.
Mounting Through pallet with M8 bolts or through blank with M10 bolts.

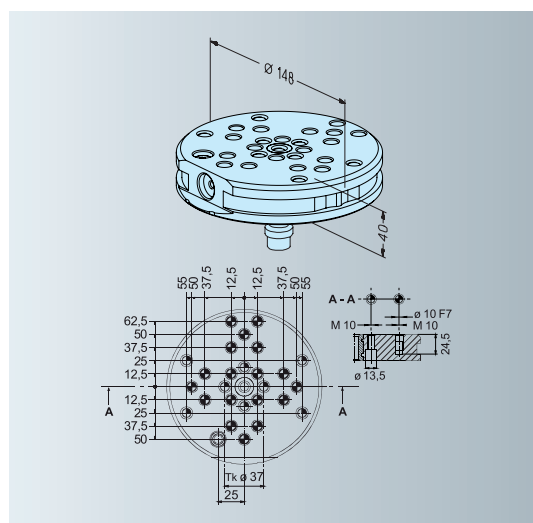


ER-015899 Pallet \varnothing 148 G R25

ER-033053 Pallet Kit \varnothing 148 G R25
4 pieces



Version Steel, nitride coated, with borehole pattern 25, \varnothing 10 F7, thread M10.
Application To accommodate EROWA ClampSet Base 220 or specially constructed fixtures and gauges.

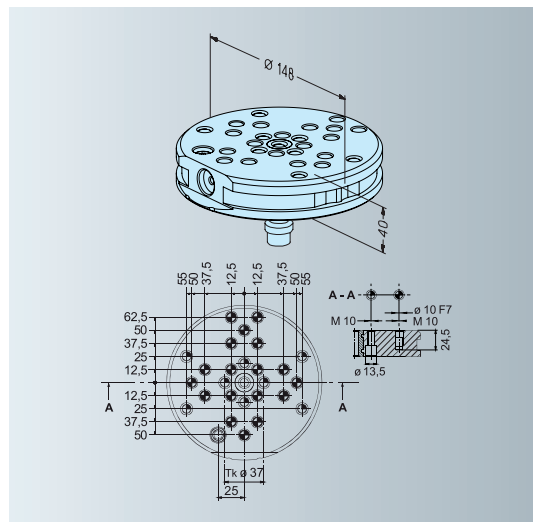


ER-015042 Pallet \varnothing 148 MS ALU R25

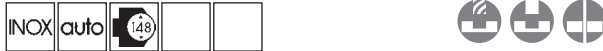
ER-033051 Pallet Kit \varnothing 148 MS ALU R25
4 pieces



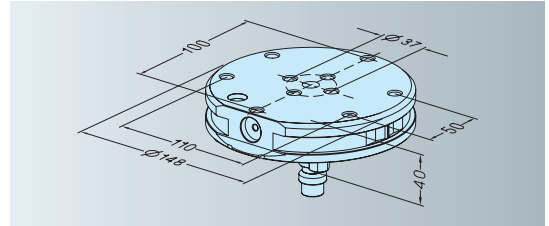
Version Body of casted aluminum with borehole pattern 25, \varnothing 10 F7, thread M10.
Application Palletizing of workpieces and electrodes, mounting of fixtures and ClampSet Base 220.
Mounting Through pallet with M8 bolts or through blank with M10 bolts.



ER-041912 Pallet P ø 148 Inox
ER-041924 Pallet Kit P ø 148 Inox
4 pieces



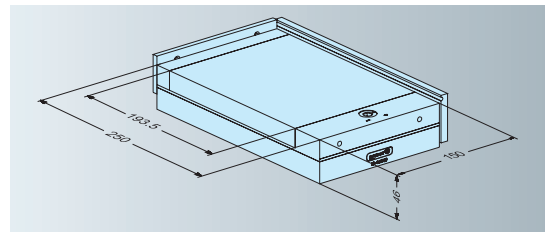
Version Steel, corrosion-resistant. Centering integrated in the pallet.
 Application For use on all EROWA PowerChucks P and Production-Chuck 210 Combi. To accommodate workpieces and fixtures in chip-cutting machining processes.
 Mounting Through pallet with M8 bolts or through blank with M10 bolts.



ER-038189 ITS magnetic clamping plate permanent
250 x 150 x 46



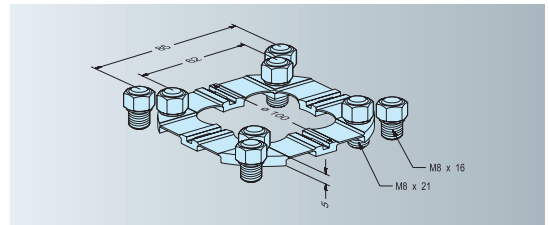
Version Magnetic clamping plate of steel with M8 attachment boreholes for ITS Pallet ø 148.
 Application To clamp workpieces for surface and profile grinding, WEDM and high-frequency milling.



ER-036658 Centering plate G Inox
5 pieces



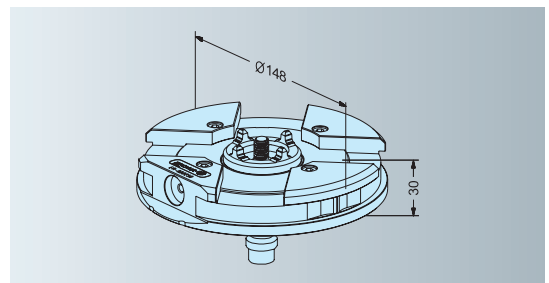
Version Ground including 8 supporting feet M8 per plate.
 Application For workpieces, jigs and fixtures in chip-removal machining.
 Mounting According to accompanying fitting instructions.



ER-022250 Adapter pallet ITS 50 / ø 148



Version ITS system size 100.
 Application Lock with central M 10 locking bolt. To accommodate ITS Electrode holders system 50. Lock with central M10 locking bolt. For automatic handling.



More workpiece carriers for the EROWA PowerChuck P palletizing system you will find on page: 136.

EROWA PowerChuck P

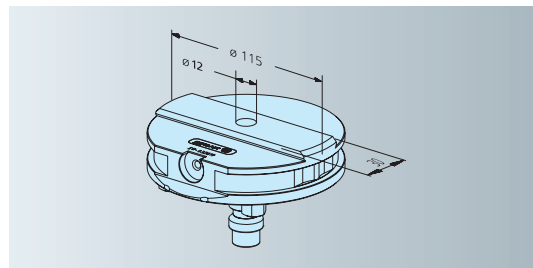
Auxiliary Equipment

ER-032819 Alignment pallet \varnothing 115



Version Pallet \varnothing 115 mm, alignment length 110 mm, center borehole \varnothing 12 mm.

Application Alignment of radial, axial and angular position of ITS chucks, PowerChuck P and PC 210 Combi chucks.

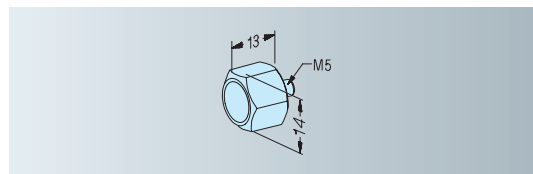


ER-035154 EWIS™ Rapid chip with chip holder SW14 with chip \varnothing 12,4 x 2 mm



Version Sleeve fitting with built-in datacarrier. EWIS Rapid chip: read only.

Application In any EROWA electrode holder and pallet which has been prepared for it.

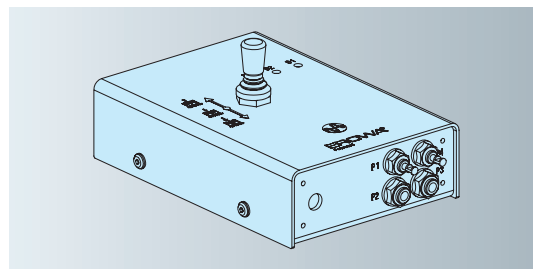


ER-008988 Manual control unit



Version Manual valve to control all the functions of ITS, ITS Compact CombiChuck, PowerChuck P and UPC: opening/reclamping/cleaning.

Application Operation of chucks on machines.



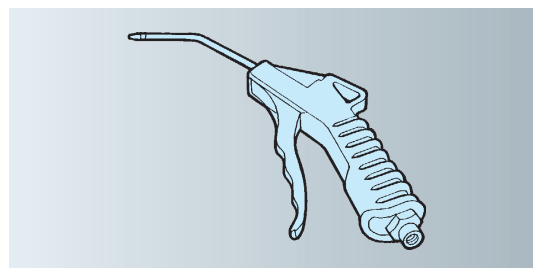
ER-001846 Air jet



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.



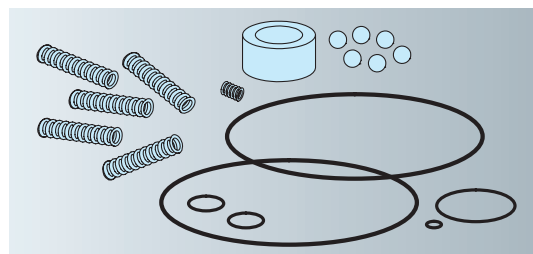
ER-015962 Repair kit PowerChuck P



Version All the wear parts of PowerChuck P.

Application Dismantle chuck according to instructions supplied, replace parts.

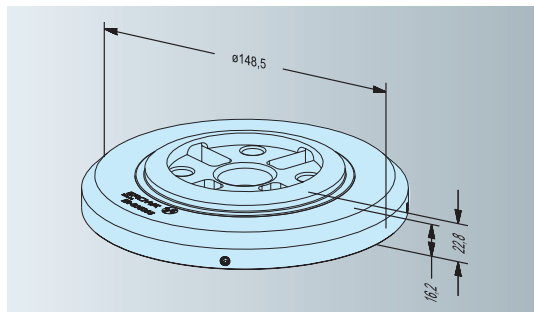
Note Every chuck is supplied with instructions. Please keep in a safe place.



ER-035365 Sealing ring PowerChuck P ø 72



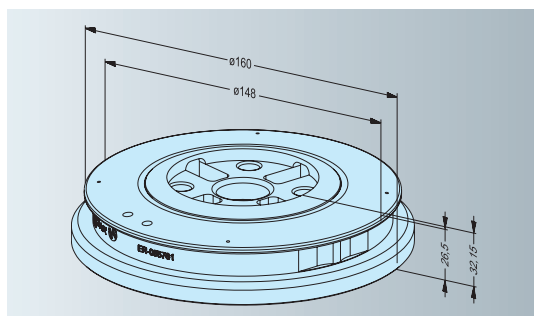
Version Aluminium anodized.
 Application Prevents penetration of chips and dirt into the PowerChuck P by application of EROWA Holders ø 72.



ER-055761 Sealing ring for holder 72 PowerChuck P



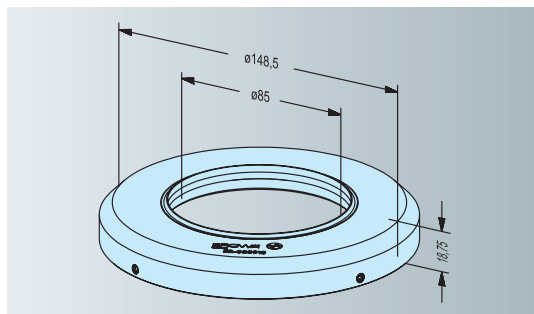
Version Rust-resistant steel
 Application Prevents penetration of chips and dirt into the PowerChuck P by application of EROWA Holders 72.



ER-038918 Sealing ring PowerChuck P / ø 85



Version Aluminium anodized.
 Application Prevents penetration of chips and dirt into the PowerChuck P by application of EROWA pallets PM85.



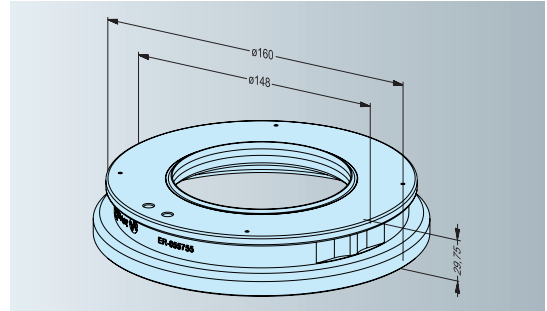
EROWA PowerChuck P

Auxiliary Equipment

ER-055755 Sealing ring for pallet PM85 PowerChuck P



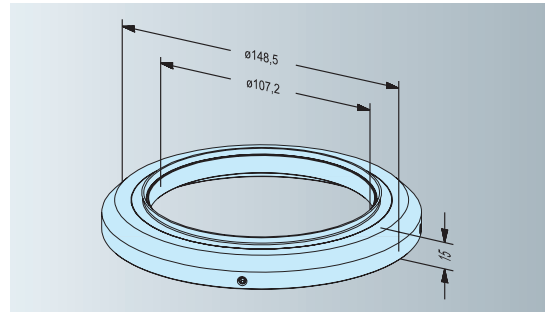
Version Rust-resistant steel.
Application Prevents penetration of chips and dirt into the PowerChuck P by application of EROWA pallets PM85.



ER-016142 Sealing ring holder \varnothing 115



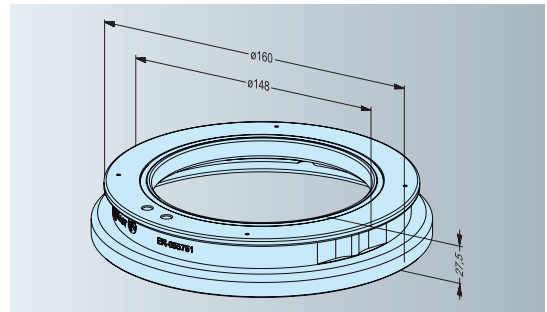
Version Aluminium anodized.
Application Prevents penetration of chips and dirt into the PowerChuck P by application of EROWA ITS pallets \varnothing 115.



ER-055751 Sealing ring for pallet \varnothing 115 PowerChuck P



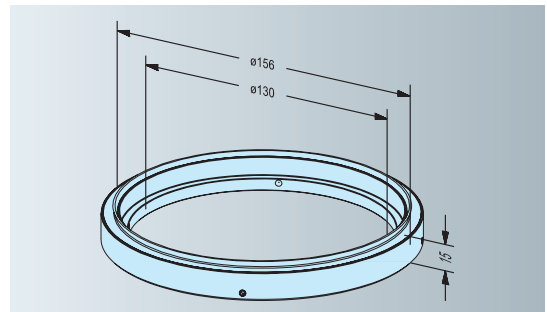
Version Rust-resistant steel.
Application Prevents penetration of chips and dirt into the PowerChuck P by application of EROWA ITS pallets \varnothing 115.



ER-016131 Sealing ring holder \varnothing 148



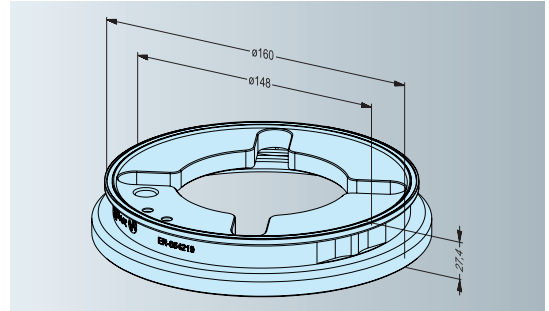
Version Steel black oxide coated.
Application Prevents penetration of chips and dirt into the PowerChuck P by application of EROWA ITS pallets \varnothing 148.



ER-054219 Sealing ring for pallet ø148 PowerChuck P



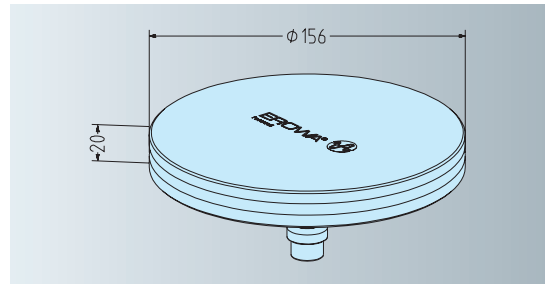
Version Rust-resistant steel.
 Application Prevents penetration of chips and dirt into the PowerChuck P by application of EROWA ITS pallets ø 148.



ER-008972 Cover for PowerChuck P



Version Aluminum. Without centering plate and supports.
 Application Protects the PowerChuck P from chips and cooling water when not in use.



ER-055763 Cover to PowerChuck P



Version Rust-resistant steel.
 Application Prevents penetration of chips and dirt into the PowerChuck P. For automatic handling.

