

## MECHATRONIK AUSTRIA GMBH



ZERTIFIZIERT

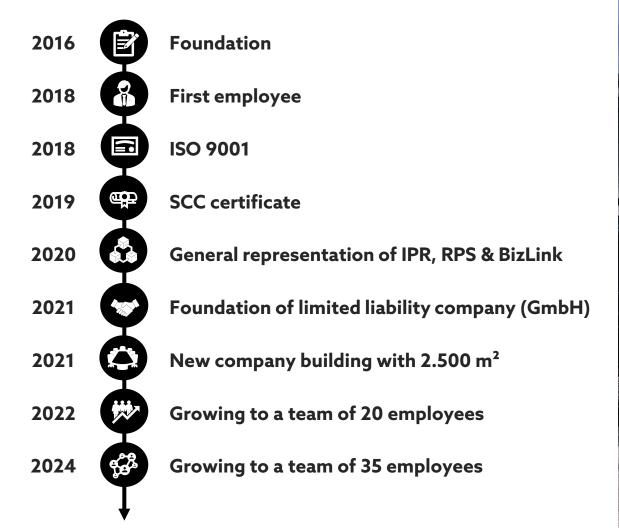
66

We develop, digitize & provide safety





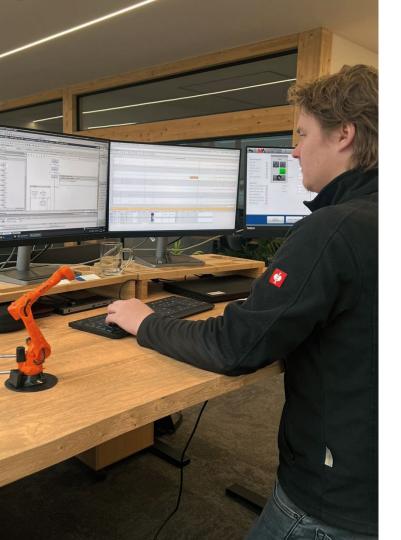
- Established in April 2016
- ISO 9001 & SCC certified
- 35 employees
- MECHATRONIK AUSTRIA is an independent technical office and software/robotics business focussing on:
  - √ Software development
  - √ Testing department
  - √ Hardware for robots





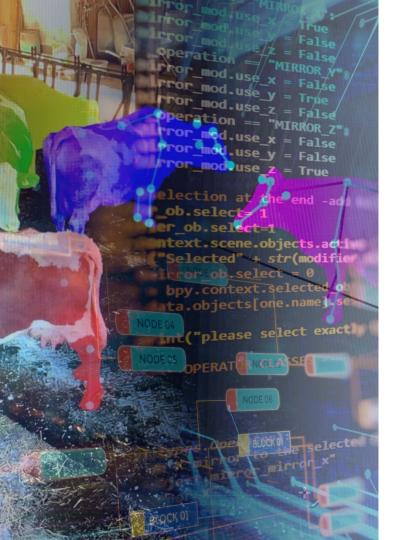
SOFTWARE DEVELOPMENT TESTING DEPARTMENT HARDWARE FOR ROBOTS





# SPS MECHATRONIK AUSTRIA GMBH PROGRAMMING

- Siemens, Beckhoff
- Safety solutions
- Customer-oriented user interfaces
- Cross-manufacturer communication of different controllers
- Analysis and optimization of existing facilities
- Prozess visualization
- Drive technology
- Consultation and inspection for the purchase of existing facilities





### **HIGH-LEVEL LANGUAGES**

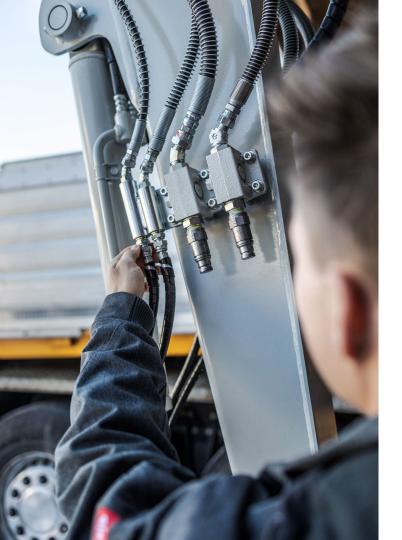
- Diverse programming languages
  - Python, C#, Delphi, C/C++
- SQL and NoSQL data connection
  - PostgreSQL, MySQL, Microsoft
     SQL, Oracle, MongoDB, CouchDB
- Connection of various interfaces
  - ProfiNet/ProfiBus, ModBus, CAN,REST, gRPC, TCP/IP
- DeepLearning in the fields of picture recognition and time series analysis



# ROBOT MECHATRONIK AUSTRIA GMBH PROGRAMMING

- Concepts and virtual tests
- Programming of various soloutions
   YASKAWA KUKA FANUC ABB
- Vision processes (e.g. for partial recognition, pallet measurement)
- Analysis and optimization of existing programmes
- TCP measurement for robots of all manufacturers
- Consultation and inspection for the purchase of existing facilities







# PERIODIC INSPECTIONS

- Electrical installations and equipment
- Lightning protection systems
- Emergency lighting
- Power-operated doors and gates
- Machines for lifting loads
- Forklifts, overhead cranes
- Construction machines
- Fall protection systems
- Holding and fall arrest harnesses
- Medical devices e.g. defibrillators



## PRÜFBUCH **KRÄNE / HEBEZEUGE** Prüfungsnummer Art des Hebezeugs Ort Bez. / Nr. im Betrieb Der Gesetzgeber sieht vor dieses Dokument an der Betriebsstätte aufzubewahren Liegen die geprüften Geräte außerhalb der Betriebsstätte, so ist das Dokument am Einsatzort oder dem Gerät selbst aufzubewahren.



## TECHNICAL DOCUMENTATION

Technical documentation is a very **important part** of a product, machine or installation.

This makes **installation**, **usage**, **maintenance** or **repair** significantly easier.

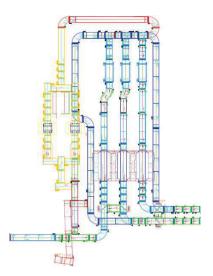
It includes all **documents** and **information** which describe the product in detail and explain its use and operation.





#### Sicherheitskonzept

Umbau Gepäckförderanlage Flughafen Salzburg GmbH



Originalsicherheitskonzept

Ausgabe: DE 2023-11; Vers. 01.0.2

Ersteller: Mechatronik Austria GmbH

## SAFETY-MANAGEMENT

- We protect people and machines
- We keep track of everything for you
- We support you in development
- We optimize processes for you
- We are reliable

This also requires calculations & simulations. These are carried out for you with our know-how and the support of the most modern technology.

#### MΛ

#### EG-Konformitätserklärung



Original - Konformitätserklärung

Technische Begleitung: Mechatronik Austria GmbH

Leogangerstraße 51a

AT-5760 Saalfelden

Der Hersteller:



erklärt hiermit, dass folgendes Produkt:

Produktbezeichnung: Typenbezeichnung: Seriennummer:

Baujahr:



allen einschlägigen Bestimmungen der Maschinensrichtlinie (2006/42/EG) entspricht.

Folgende harmonisierte Normen wurden angewandt:

ÖNORM EN ISO 12100

Sicherheit von Maschinen Allgemeine Gestaltungsleitsätze – Risikobeurteilung und Risikominderung

Ort:

Saalfelden



Daniel Hofer, Test Engineer

Mechatronik Austria GmbH



## EU DECLARATION OF CONFORMITY

We create the **CE marking** of your product, machine or installation in compliance with all standards and directives:

- Individual systems
- Interlinked systems
- Retrofit / conversions









# EXPERT OPINIONS & REPORTS

By sworn **experts** in the fields of **machinery-** and **plant engineering**.

- Expert opinion
- Damage assessment
- Static calculations
- Estimates & valuations





## **HARDWARE FOR ROBOTS**

**EVERYTHING FROM ONE PROVIDER** 

**EXCLUSIVE DISTIBUTION PARTNER** | IPR, BizLink & RPS







## COMPANY PRESENTATION RPS GmbH

Tailor-made **robot protective suits** for all applications

#### **HEAT PROTECTION**

Temperature resistant up to 1200 °C

#### **SANDBLASTING**

Highly resistant to blasting with corundum, steel balls, sand

#### **FOOD**

High-pressure resistant, dirt repellent, easy to clean surface

#### **CLEAN ROOM**

Meets requirements
according to Norm FDA 21
CFR Kap.1 and EGV 1935/04

#### **HOSE PROTECTION**

No need to disconnect cables, quick change intervals

#### **GRIPPER**

High flexibility, longlife, special adaptation

**PROTECTION** 









### **HEAT PROTECTION**

- **RPS TG18**: heat-resistant up to 450 °C with direct contact
- **RPS TG09**: heat-resistant up to 500 °C, dirt-repellent, resistant to separating agents
- **RPS TG50**: temperature-resistant up to 1200 °C







### **SANDBLASTING**

- ✓ Special rubber
- ✓ Highly resistant to blasting with corundum, steel spheres, grey cast iron, sand
- ✓ **Cold-vulcanized seams** therefore no infiltrate by media possible
- ✓ Highly abrasion resistant
- ✓ Extremely flexible







### **FOOD / CLEAN ROOM**

- Meets the requirements according to Norm FDA 21 CFR Kap.1 and EGV 1935/04
- **Resistant to** all cleaning products known to us
- Further benefits: high-pressure resistant, dirt-repellent, easy to clean surface







### **HOSE PROTECTION**

- Protection possible for all areas
- No need to disconnect cables
- Quick change intervals due to different closures







### **GRIPPER PROTECTION**

- Highly **flexible**
- Long life
- Special adaptation
- Protection for all areas possible e.g. camera, electronics, sensors etc.

### **COMPANY PRESENTATION**

### **BizLink Factory Automation**

Standardized cables, special cables and assembled systems as well as intelligent products and smart services

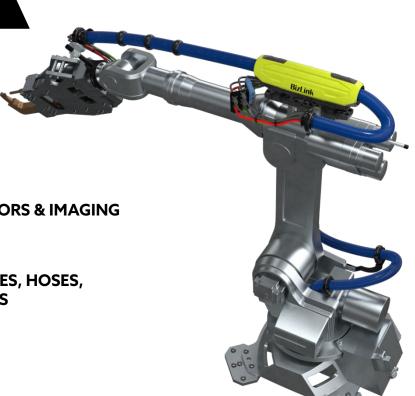
**ENERGY SUPPLY** O1 SYSTEMS

**02** DRESSPACKS

**TOP PRODUCT GROUPS** LSH3 6 // LSC 7 // LSH-DELTA // Special Solutions

**1** SENSORS & IMAGING

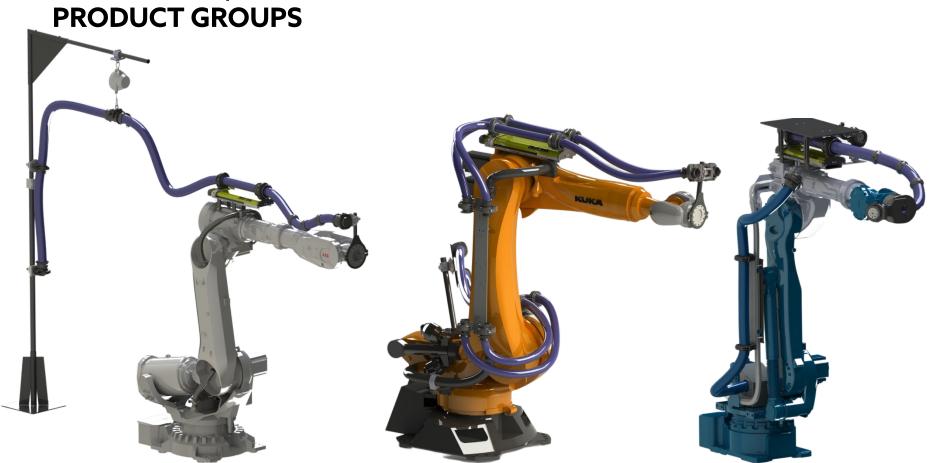
O5 CABLES, HOSES, TUBES

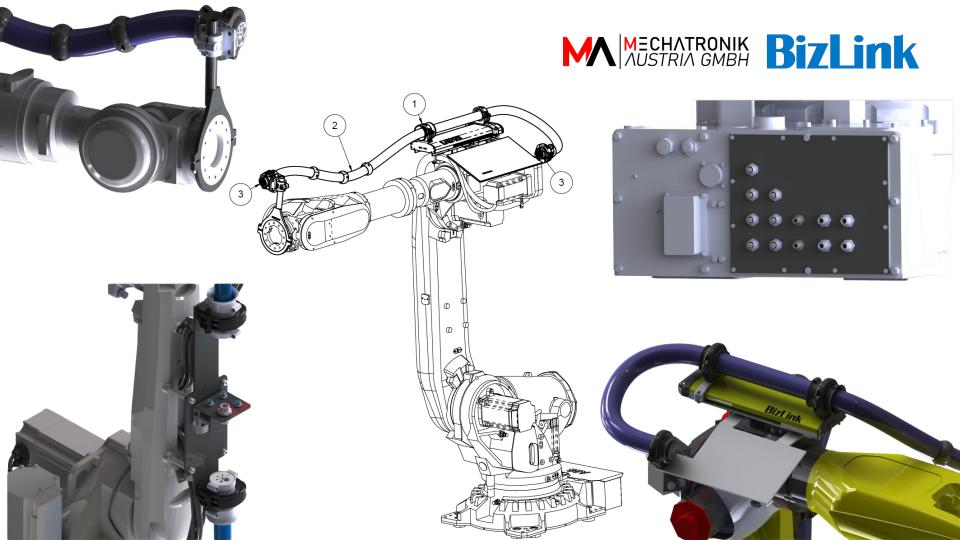


MECHATRONIK BIZLINK



## BizLink Factory Automation





## BizLink Factory Automation **PRODUCT GROUPS**





## BizLink Factory Automation **PRODUCT GROUPS**





- ✓ Simple assembly
- ✓ One base plate for several robot types
- ✓ Easily adjustable on the base plate withSlide & Click





#### Vakuum-Greifer / vacuum gripper axis 2 – 6 CA FANUC R2000iC/210L

Mechatronik Austria

without fitting

Komponentenlänge: length of components:

Endmontage:

final assembly:

. . . . .

Pos. 5

without fitting

Wellrohrlänge: 3,00 m proflex 48 BU length of corrugated hose: +2x NBES-48G

4.50 m

M48-BU

2x Gelenkendstück / simple trumpet 2x Zugentlastung / cable star 3x Protection

pel B00761-00-39 B00760-14-35-15 B00781-29 ring NSA0000131-1

1x Markierungsring rot / marking ring 2x Markierungsring weiß / marking ring Etikett / label NSA0000133-1

99.0mm T0362-01-XXX 96.0mm T3851-50-XXX 96.0mm T3851-50-XXX 96.5mm MPAN-R-22X2-SW

2x Markierungsringe wells/ marking rings white NSA000133-1 Eliket! / label Community of the NSA00013-1 Optimization to the N

1.	T3851-50-045 M12-D, 4pol. Stift / pin	[4xAWG22] beidseitig nummeriert "1" / numbered on both sides "1"	M12-D, 4pol. Stift / pin	
2.	T0362-01-045 7/8*, 5pol. Stift / pin	5x1,5mm² beidseitig nummeriert _1" / numbered on both sides _1"	7/8", 5pol. Buchse / socket	

. **T3851-50-045**M12-D, 4pol. [4xAWG22] M12-D, 4pol.
Stift / pin beidseitig nummeriert ,2\* / numbered on both sides ,2\* Stift / pin

. **T0362-01-045**7/8", Spol. Stift pin beidseitig nummeriert,2" / numbered on both sides 2" Buchse / socket

\$0341-31-045 Kabelschuh Ø8mm 1x 10,0mm² Kabelschuh Ø8mm

 cable eye Ø8mm
 cable eye Ø8mm

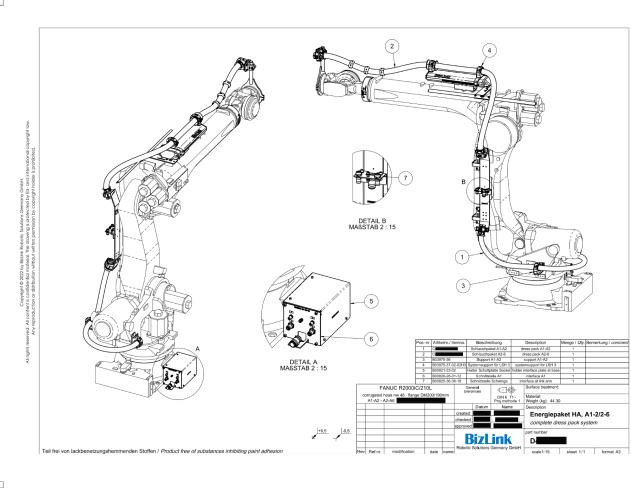
 MPAN-R-22X2-SW
 urkonfektioniert

 urkonfektioniert
 FESTO 8036207
 urkonfektioniert

We guarantee that all special cables, wires and auxiliary material are absolutely five from silicone. This drawing is not allowed to be duplicated or notified to a third person or a competition corepany neither in original nor as copy without our written permission (§§16-17 UhrG). In case of contravention we keep the right of claiming for damages (697 UhrG) and the nother of charantee for a cenarity (661 G. 108 LH/G). Totalcances see BRSG S. THM.

Länge / length: 4,50m

(397 Ortho) and the right of deliterating for a periodic (393 Oo. 1008 Ortho). Foerlandes see 67:00_0-1194.										
Biz	D: 1. 1	checked by / geprüft:					ī			
	<b>BizLink</b>	revision / Ånderung			Rev.	000	_			
	DIZLIIIN	created by / erstellt:			on / am:					
Bizl ink Robotic Solutions Germany GmbH					Sai	ita 1 von 1	_			



CABLES, HOSES, TUBES







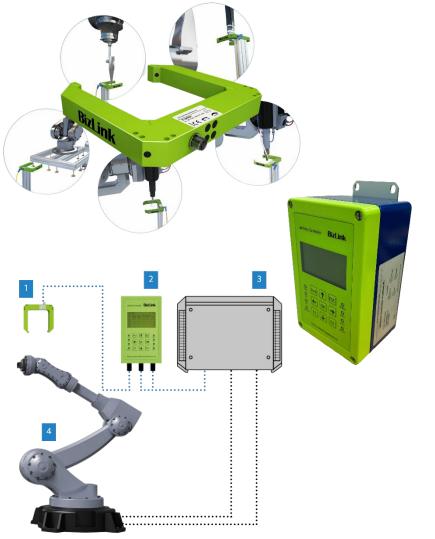














# SENSORS & IMAGE PROCESSING

- ✓ Uncomplicated
- ✓ Reduction of robot programming effort to a minimum
- √ Fast assembly
- ✓ Simple commissioning
- ✓ Continuous logging of measurement data
- ✓ No need for additional PCs

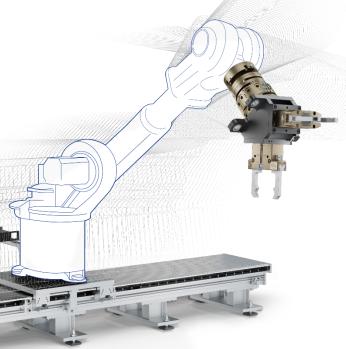
### **COMPANY PRESENTATION**

## IPR Intelligente Peripherien für Roboter GmbH





Industry-specific solutions for robot applications and automation solutions



#### **GRIPPER**

Reliable gripping of components

## COMPLIANCE & COMPENSATION SYSTEMS

Reliable compensation of tolerances

## COLLISION PROTECTION SYSTEMS

Reliable detection of collisions

#### 7th AXIS

IPR has the right 7th axis solution for every application

#### TOOL CHANGER

Fast and safe changing of tools on the robot or gantry







# PARALLEL GRIPPER SERIES CGS2

#### **ADVANTAGES**

- No prescribed sensor technology
- ✓ Long gripper fingers possible
- √ 1:1 interchangeable with the benchmark through:
  - > wide range of sizes
  - precise and reliable use
  - handling weights up to 95kg
  - maximum gripping forces









# FINGER-CHANGE SYSTEM

#### **ADVANTAGES**

- ✓ Up to 60% lower installation height than comparable products
- ✓ Maximum power density thanks to hardened steel
- ✓ High-quality corrosion protection

Manual changing of gripper fingers within seconds: The new FWS from IPR makes this possible! One turn with the tool is all it takes to release the specially developed locking kinematics.











- ✓ Precise small parts gripper
- ✓ High power density
- ✓ Optional: gripping force maintenance



### **WGS-Series**

- √ Fast gripping of different parts
- ✓ Durable and robust
- Optional: gripping force maintenance and stroke limitation



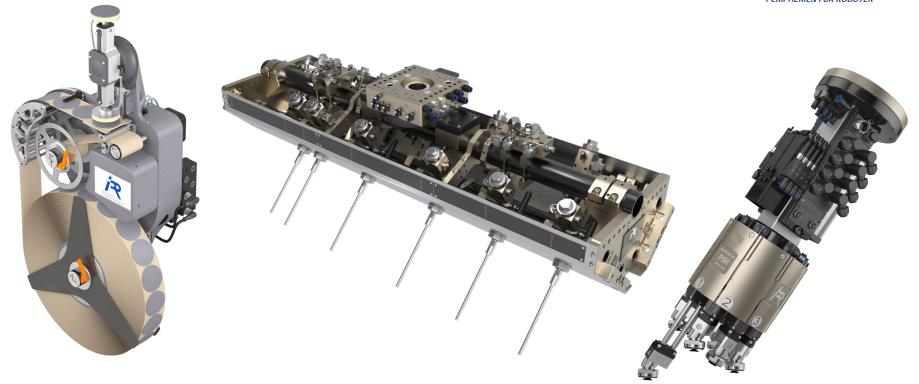
### **CGS3-Series**

- ✓ Universal centric gripper
- √ Ideally suited for round workpieces
- ✓ Optional: Dust cover and pressure star

### **SPECIAL SOLUTIONS**

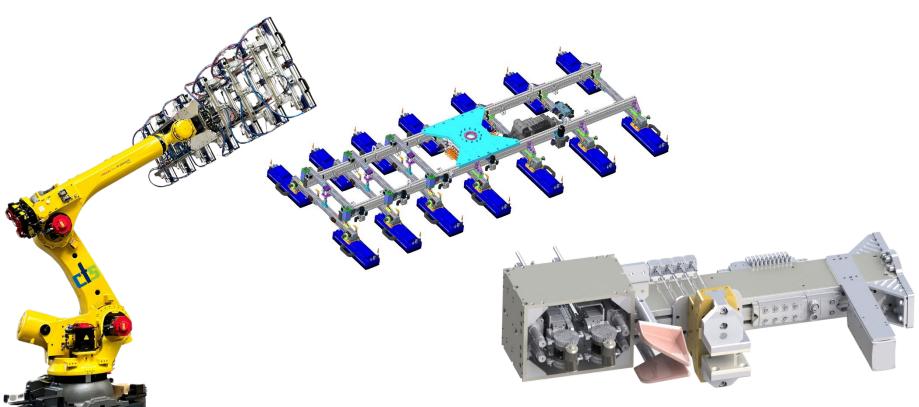






### **SPECIAL SOLUTIONS**





# COMPLIANCE AND COMPENSATION SYSTEMS







#### **COMPLIANCE WRISTS**

Compensation of position errors in the x/y-direction up to  $\pm$  3 mm as well as angle compensation up to  $\pm$  2°



## FORCE-FREE COMPENSATING ELEMENTS

Compensation of position errors in the x/y- direction of up to +/-25 mm



#### **Z-AXIS-COMPLIANCE**

Scanning of heights and compensation of differences in the z-direction up to 12 mm



#### **RT-KA**

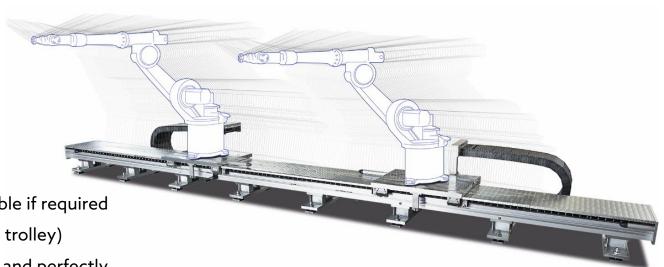
Compensation in x/y direction up to +/- 5 mm and rotation angle compensation of up to +/-  $5^{\circ}$ 





## 7<sup>th</sup> AXIS Simple. Robust. Flexible.

- √ Highest precision
- √ Space saving
- √ Fully accessible
- Extendibility easily possible if required (extension and additional trolley)
- ✓ Modular design flexible and perfectly adaptable to customer needs
- ✓ Independent of robot manufacturer



FOR LOADS FROM 20 TO 12.000 KG

# 7th AXIS IN ALUMINUM & STEEL









# 7th AXIS IN ALUMINUM & STEEL





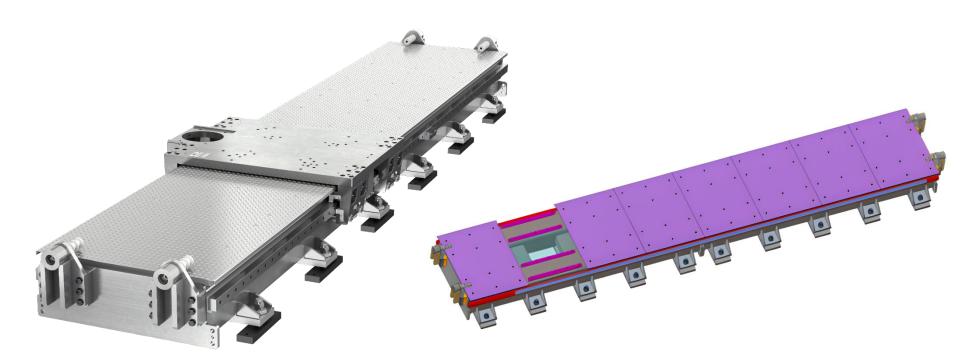
Hybridaxis IP350-BH







## HYBRID 7<sup>th</sup> AXIS The best of two worlds



# TOOL CHANGERS TK-SERIES





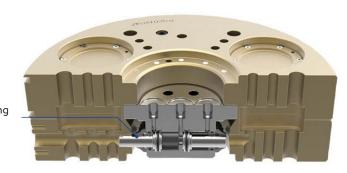
Robot side with locking set and centering pins

Tool side with locking and centering bushings



Optional power strips

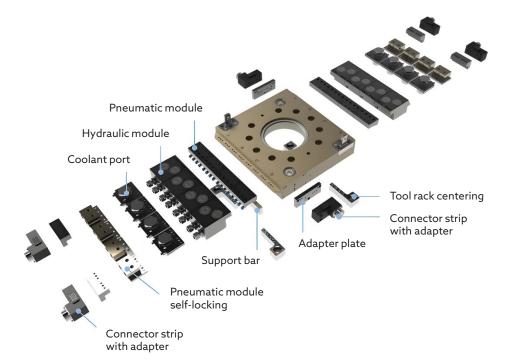
Optional piston monitoring



Safety interlock

- ✓ Compact dimensions
- ✓ Quick and easy coupling thanks to extra-long centering pins
- ✓ Internal air feed-throughs
- ✓ Integrated slot for process-safe storage
- ✓ Handling weight of up to 800 kg

# TOOL CHANGER TK-SERIES SQUARE







#### **ADVANTAGES**

- Safe, redundant locking in the event of a power failure
- Quick change of tools and grippers on the robot or the gantry
- ✓ Simple assembly
- ✓ High flexibility due to short changeover times
- High availability and long service life due to perfectly matched assemblies
- ✓ Up to 1250 kg handling weight

### TKX-PRODUCT FAMILY





### 3 drives - compatible and interchangeable



- ✓ Large portfolio from 3 to 800 kg handling weight
- Extremely robust and low-wear thanks to hard chrome-plated functional parts
- Improved compressed air transmission thanks to specially developed seals

## MECHATRONIK AUSTRIA GMBH

WE **DEVELOP**,
WE **DIGITIZE**,
WE ENSURE **SAFETY**.



#### SCAN OR CODE NOW

mechatronik-austria.at

