



**KUKA Presentation for ECHORD Opening Event**

Deutsches Museum, Munich, 4 September 2009

**Rainer Bischoff**

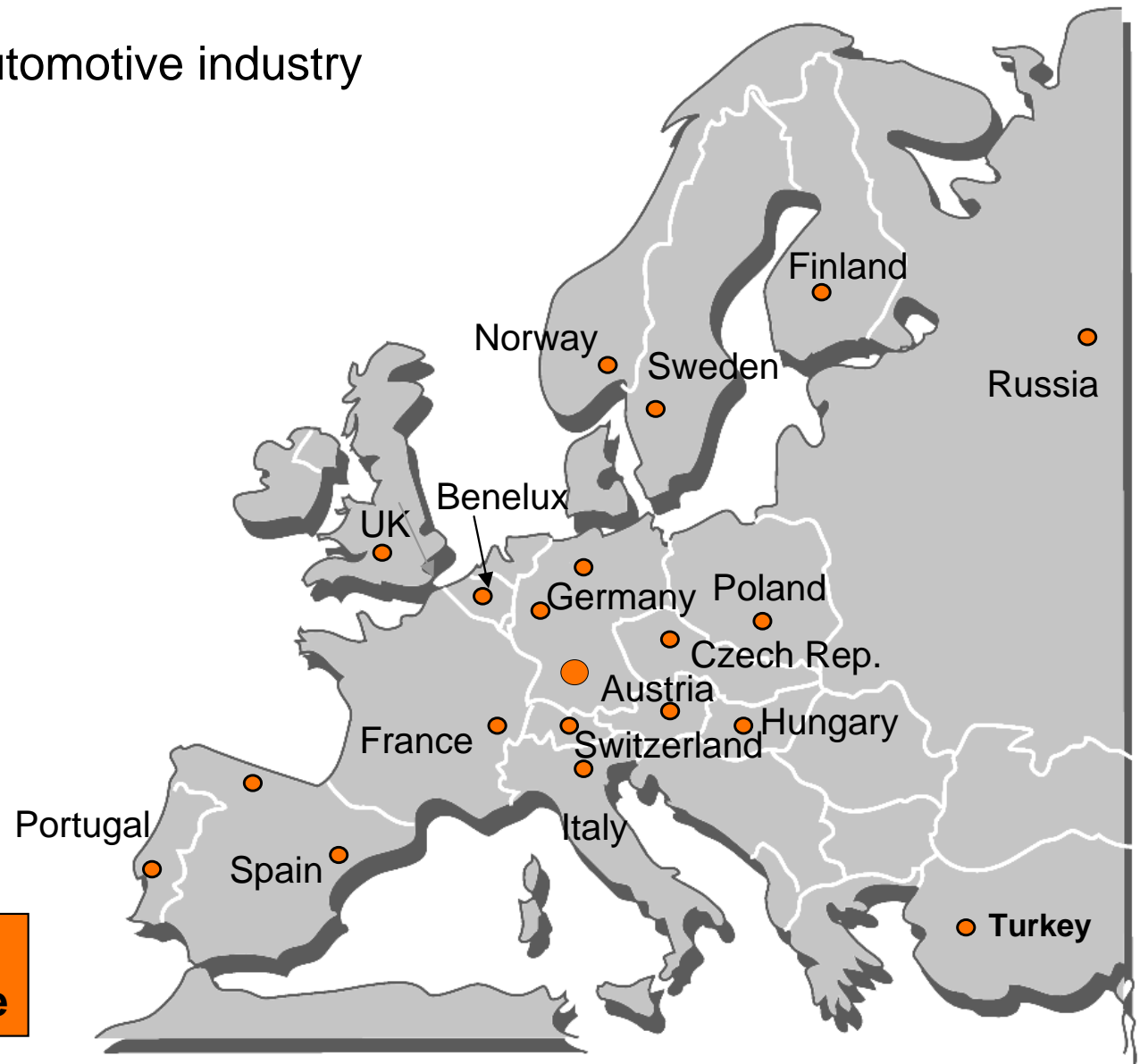
Coordinator Cooperative Research Projects

KUKA Roboter GmbH



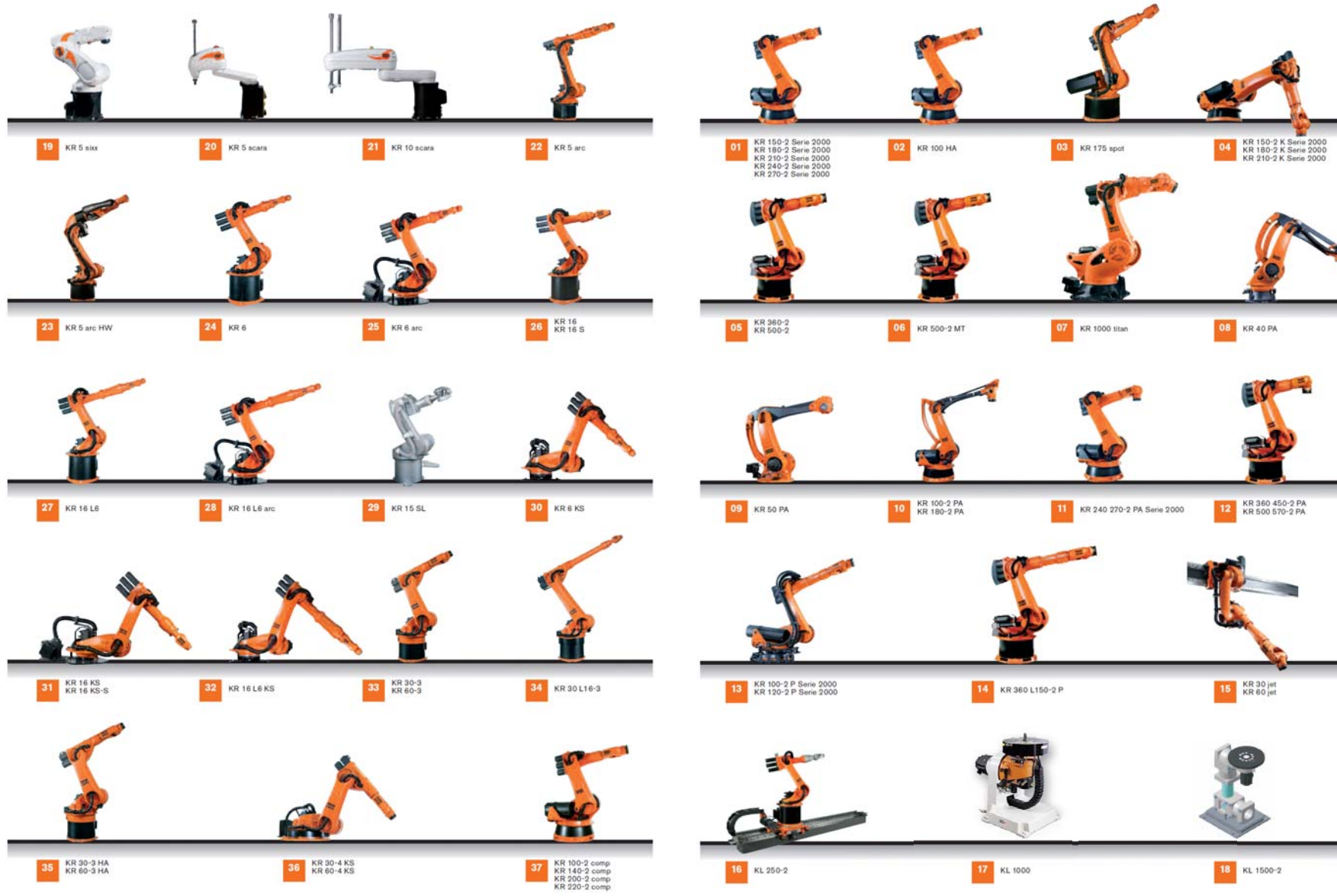
## KUKA Roboter GmbH – We are at your service!

- leading supplier to the automotive industry
  - innovation leadership
  - market leadership
- strong in new markets
  - medical
  - entertainment
  - food
- customer services
  - robotic consulting
  - college / Training
  - technical support



**ECHORD contact:**  
**HelmutFiege@kuka-roboter.de**

## KUKA Roboter product range



## KUKA Roboter product range – ECHORD offerings

19 KR 5 sixx	20 KR 5 scara	21 KR 10 scara	22 KR 5 arc
23 KR 5 arc HW	24 KR 6	25 KR 6 arc	26 KR 16 KR 16 S
27 KR 16 L6	28 KR 16 L6 arc	29 KR 15 SL	30 KR 6 KS
31 KR 16 KS KR 16 KS-S	32 KR 16 L6 KS	33 KR 30-3 KR 60-3	34 KR 30 L16-3
35 KR 30-3 HA KR 60-3 HA	36 KR 30-4 KS KR 60-4 KS	37 KR 100-2 comp KR 140-2 comp KR 200-2 comp KR 220-2 comp	
		05 KR 360-2 KR 500-2	06 KR 500-2 MT
		07 KR 1000 titan	08 KR 40 PA
		09 KR 50 PA	10 KR 100-2 PA KR 180-2 PA
		11 KR 240 270-2 PA Serie 2000	12 KR 360 450-2 PA KR 500 570-2 PA
		13 KR 100-2 P Serie 2000 KR 120-2 P Serie 2000	14 KR 360 L150-2 P
		15 KR 30 jet KR 60 jet	
		16 KL 250-2	17 KL 1000
		18 KL 1500-2	

## KUKA Lightweight Robot – Basic Data

- payload: 7 kg (14 kg w. limit.)
- weight: 14 kg
- joints: 7 (R–P–R–P–R–P–R)  
torque sensors in each joint
- control: position, torque,  
and impedance control
- power supply: 48 V DC internal,  
220 V AC external
- cable route: internal
- controller: KRC 2 Ir (19" cabinet)
- interfaces: Ethernet RSI – XML (12 ms)  
Fast Research Interface (1 ms)



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**First public LWR Info Day at KUKA – 25 September 2009!**



## Suggestions for application scenarios / research foci



Easily programmable manufacturing assistants



Transformable production



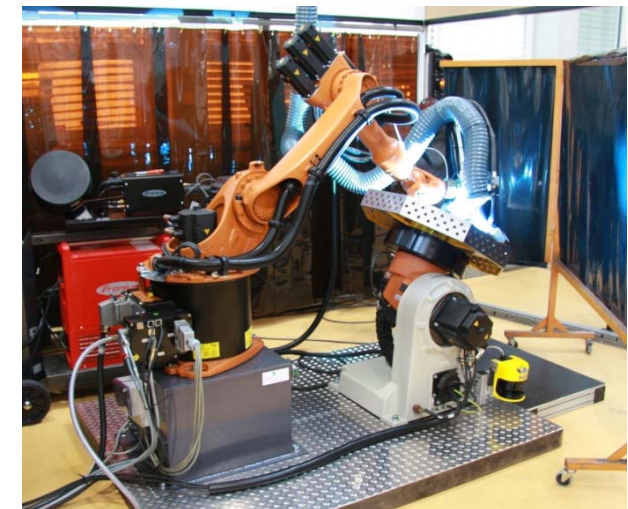
Training concepts for new robot technology



Safety aspects of human-robot collaboration



Human-like assembly



Process path planning for multiple axes kinematics