Active Contact Flange ACF

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Compliant Robot Technology GmbH

Robots under Pressure

Best Practice
Amortization Example

RETROFITTING in low-wage area

Premium car manufacturer: Grinding of roof joint with Active Contact Flange

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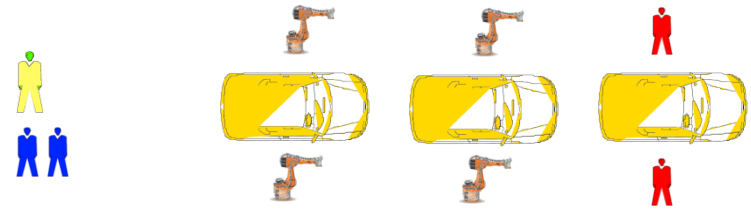
Retrofitting of a plant in a low-wage area

Automated grinding of the roof joint on the car body. The Active Contact Flange is responsible for the constant contact force in the sanding process.

Initial situation:



Supervisor
Stand-by/Grinding Tool [1)]
Grinding Tool [1)]

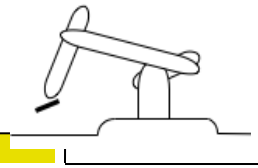
1) Exceed the limit value for daily exposure on hand-arm vibration.

Improvement:

Initial situation: 5 operators
(4 of these are exposed to a health risk due to hand-arm vibrations)

Improved situation: 1 operator
(no health risk due to hand-arm vibrations)

Premium car manufacturer: Grinding of roof joint with Active Contact Flange



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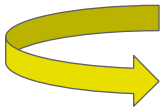
Retrofitting of a facility in a low-wage area

<u>One time investment and savings</u>	
2 Grinding units with Active Contact Flange	€ 60,000,-
2 Robots saved (€ 40,000 each)	€ - 80,000,-
Total	**€ - 20,000,-**
<u>Running cost advantages per year</u>	
Savings in labor costs (4 employees at € 10,000 x 3 shifts)	€ - 120,000,-
Savings in sanding materials 75% of € 50,000 per year	€ - 37,500,-
Savings in energy	€ - 15,000,-
Savings in service and replacement parts	€ - 20,000,-
Total	**€ - 192.500,-**



Amortization from day 1 on