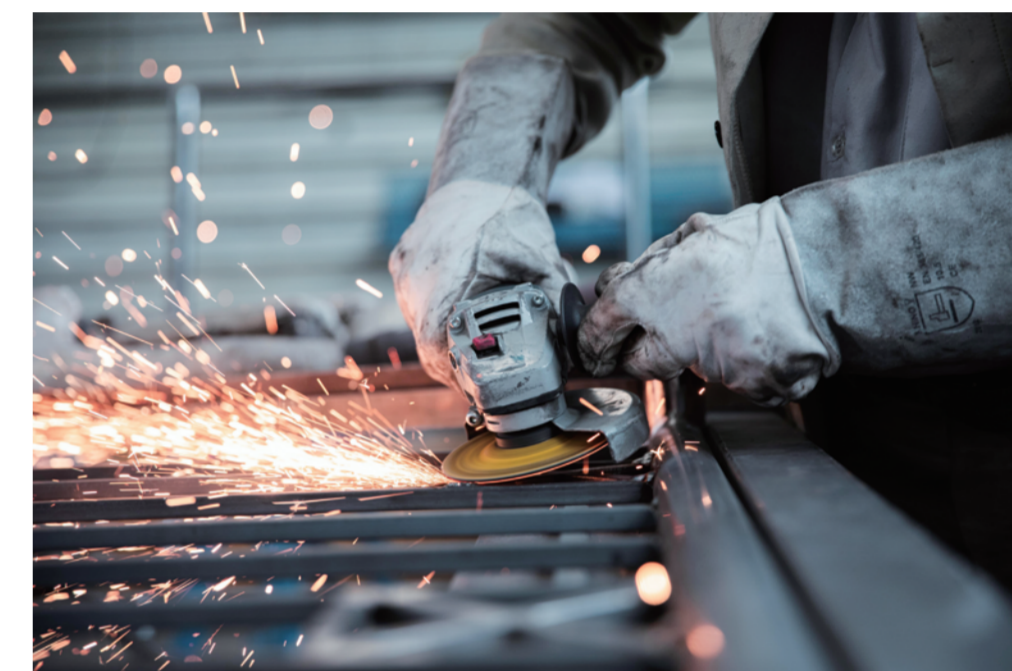


Polishing Robot Package

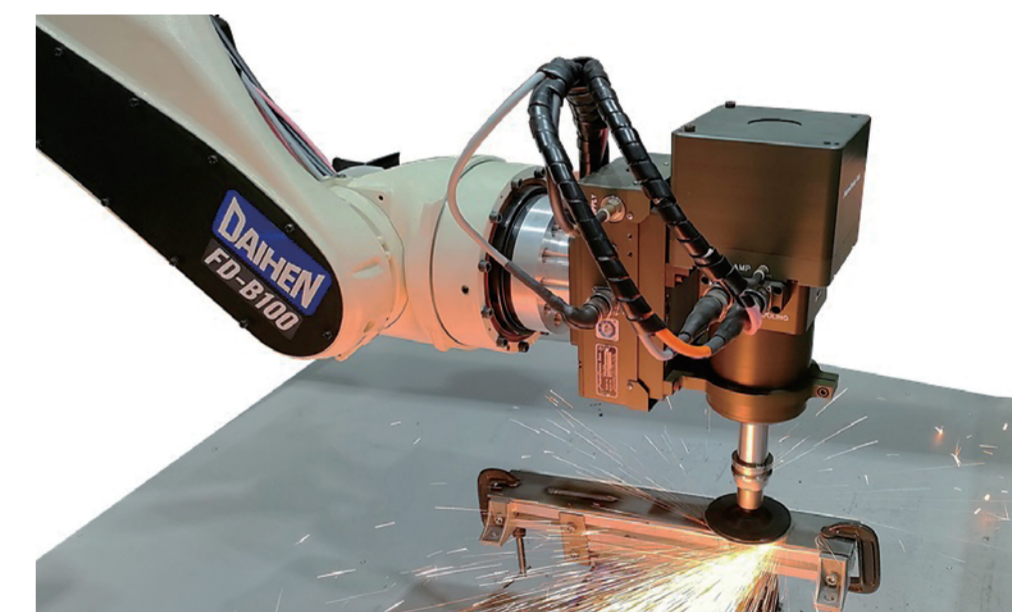
Challenges in polishing work sites

- 3K work is not attracting young workers and there is a shortage of manpower.
- Quality is unstable, depending on the operator.
- Impact on workers due to working environment (dust, heavy workload)



Polishing Robot Contributes to Productivity Improvement

- Uniform polishing grain and stable finish are achieved by load control.
- Automation from roughing to finishing with a single robot

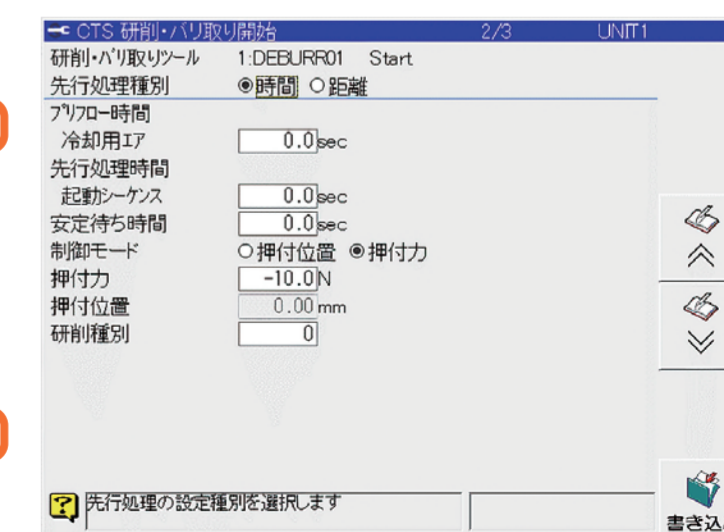


Equipped with dedicated grinding and polishing instructions

- Easy numerical input of machining conditions from teach pendant (pushing force, spindle rotation speed, etc.)

	200	cm/m	LIN	A8P	T1	
3	100	%	JOINT	A8P	T1	
4	CTS[C1, OFF, 12000r/min, FWD, 100cm/m, 00, 00, -					
5	200	cm/m	LIN	A8	T1	
6	SHIFTR[1, 1, R1, 10000] FN52; シフト					
7	200	cm/m	LIN	A8	T1	
8	200	cm/m	LIN	A8	T1	
9	SHIFTR[0, 1, R1, 10000] FN52; シフト					
10	200	cm/m	LIN	A8P	T1	
11	CTE[C1, OFF, 0.0sec, 0.0sec] FN466; 研削					
12	100	%	JOINT	A8	T1	
13	5.0	%	JOINT	A8	T1	

Teaching screen



Grinding condition settings

Polishing Robot Package

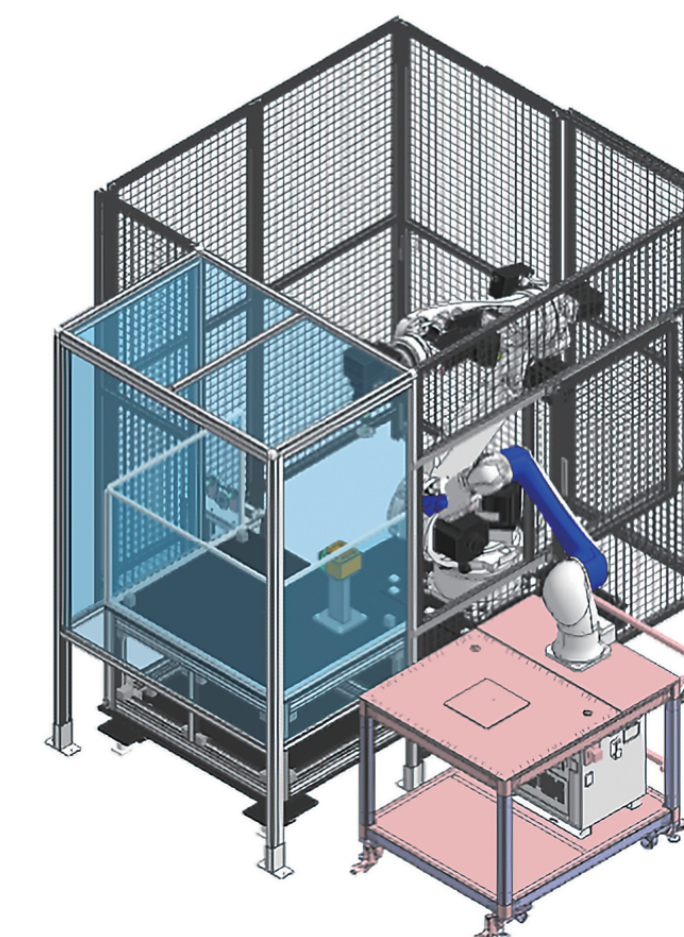
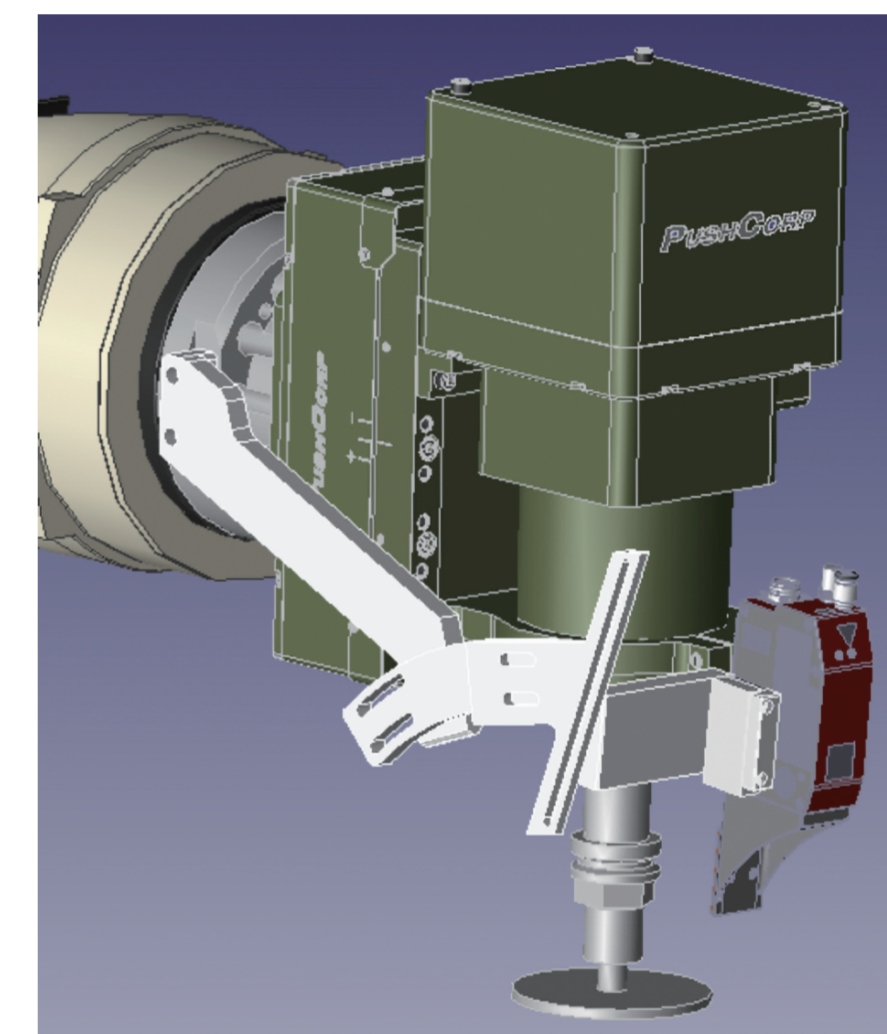
Automatic grinding to target residual height



- Detects the height of the excess height using a laser sensor
- Estimates the degree of abrasive wear based on the amount of grinding before and after grinding.
- Automatic tool change to new abrasive

Workpiece loading/unloading can be automated

- Workpiece exchange by cooperative robots without human intervention in a dusty environment
- Detects approaching workers and automatically switches operation speed





Collaborative robots ideal for handling applications

Ideal for handling applications

- 12kg payload + long reach of over 1.4m
- Built-in application cable minimizes cable interference to peripheral devices
- By expanding the movement range of each axis,
- Capable of handling in various postures (compare VC4)

High Safety

- Arm shape to mitigate impact upon contact and prevent pinching
- Decelerate or stop before contact with a person by area sensor



FD-VC12