

# AAK ACTIVE ANGULAR KIT

# INTEGRATED GRINDING SOLUTION FOR TEXTURED SURFACE TREATMENT

The AAK is a finely tuned system package based on the Active Compliant Technology (ACT) and an angle grinder optimized for robot use. This integrated complete solution automates the industrial grinding process with individual control of all process parameters: rotation speed, contact force and feed rate. The AAK offers the highest process quality from a single source. The system design is compact and light. The enormously durable grinder is designed for industrial use and delivers twice the output of standard devices, 24 hours a day, 7 days a week.

Surface treatment: Grinding, deburring

**All materials:** Steel, aluminum, titanium, magnesium, carbon, plastic, wood, ceramic...







## GLOBAL NOVELTY

# GRINDING PACKAGE SOLUTION FOR INDUSTRY 4.0

- User-friendly industrial package solution
- Robot-compatible grinder combined with all the benefits of ACT system cooperation
- · For all industries and materials

### QUICK, FLEXIBLE, SAFE

- High performance and functionally optimized system for immediate integration
- Rapid job modulation directly by the end user
- Optimal functionality, productivity and process reliability

## **CONTROL OF ALL PROCESS PARAMETERS**

- Contact force on the surfaces in an integrated system solution
- Feed rate of the robot
- · Rotation speed of the angle grinder

#### **TOP QUALITY**

- Precisely even surface texture thanks to a process-optimized package solution
- No post-processing
- The highest quality level 24 hours a day,
   7 days a week



Control of the feed rate

Control of the contact force on surfaces by ACT

Angle grinder with doubled output

Control of the rotation speed

#### COMPACT AND SIMPLE

PRECISE APPLICATION OF FORCE

DEVICES ARE ARTIFICIALLY CONDITIONED

# **SPECIFICATIONS**

Ordercorde	AAK/201
Max. force (push/pull) [N]	160
Stroke [mm]	35.5
Dimensions [mm]	Max. 220 x 194 x 279.6 Bolt circle ISO 9409-1-80-6-M8 standard flange ø80
Dead weight [kg]	~ 8.5
Power supply	<ul> <li>24 V (DIN-track)</li> <li>380 - 500 V AC (frequency inverter)</li> <li>ø8 mm air supply</li> <li>Max. 7 bar, 30µm, ISO 8573-1 Kl.3 (oil &amp; water free)</li> </ul>
Max. speed [rpm]	10,000
Motor power (S3) [W]	700
Motor peak power (S2) [W]	1,500
Grinding disc	M14 drive Spindle thread: fits to ø75 mm - ø125 mm (ø3" - ø5"), with ø22.2 mm (ø7/8") drill-hole
Air consumption [l/min]	20 – 30
Ambient temperature during operation[°C]	+5 +45
Protection class	IP65 / if equipped with adequate filters



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# AAK XS ACTIVE ANGULAR KIT XS

# INTEGRATED GRINDING SOLUTION FOR TEXTURED SURFACE TREATMENT

The AAK XS is a finely tuned system package based on the Active Compliant Technology (ACT) and an angle grinder optimized for robot use. This integrated complete solution automates the industrial grinding process with individual control of all process parameters: rotation speed, contact force and feed rate. The AAK XS is developed for minor material removal and offers the highest process quality from a single source. The system design is compact and light.

The enormously durable grinder is designed for industrial use and delivers twice the output of standard devices, 24 hours a day, 7 days a week.

**Surface treatment:** Grinding, polishing, cleaning, deburring **All materials:** Steel, aluminum, titanium, magnesium, carbon, plastic, wood, ceramic, coconut fiber...







## GLOBAL NOVELTY

# GRINDING PACKAGE SOLUTION FOR INDUSTRY 4.0

- User-friendly industrial package solution
- Robot-compatible grinder combined with all the benefits of ACT system cooperation
- · For all industries and materials

#### **QUICK, FLEXIBLE, SAFE**

- High performance and functionally optimized system for immediate integration
- Rapid job modulation directly by the end user
- Optimal functionality, productivity and process reliability

## **CONTROL OF ALL PROCESS PARAMETERS**

- Contact force on the surfaces in an integrated system solution
- Feed rate of the robot
- Rotation speed of the angle grinder

#### **TOP QUALITY**

- Precisely even surface texture thanks to a process-optimized package solution
- No post-processing
- The highest quality level 24 hours a day,
   7 days a week

COMPACT AND SIMPLE

PRECISE APPLICATION OF FORCE

**DEVICES ARE ARTIFICIALLY CONDITIONED** 



Control of the feed rate

Control of the contact force on surfaces by ACT

Angle grinder with doubled output

Control of the rotation speed

# **SPECIFICATIONS**

Ordercode	AAK/401
Max. force (push/pull) [N]	100
Stroke [mm]	35.5
Dimensions [mm]	Max. 220 x 194 x 258.2 Bolt circle ISO 9409-1-80-6-M8 standard flange ø80
Dead weight [kg]	~ 7
Power supply	<ul> <li>24 V (DIN-track)</li> <li>380 -500 V AC (frequency inverter)</li> <li>ø8 mm air supply</li> <li>Max. 7 bar, 30µm, ISO 8573-1 Kl.3 (oil- &amp; water free)</li> </ul>
Max. speed [rpm]	10,000
Motor power (S3) [W]	597
Motor peak power (S2) [W]	785
Grinding disc	M14 drive Spindle thread: fits up to ø4.5" (ø115 mm), with ø22.2 mm (ø7/8") drill-hole
Air consumption [l/min]	5 – 10
Ambient temperature during operation [°C]	+5 +45
Protection class	IP65 / if equipped with adequate filters





# AAK HD ACTIVE ANGULAR KIT HD

# INTEGRATED GRINDING SOLUTION FOR TEXTURED SURFACE TREATMENT

The AAK HD is a finely tuned system package based on the Active Compliant Technology (ACT) and an angle grinder optimized for robot use. This integrated complete solution automates the industrial grinding process with individual control of all process parameters: rotation speed, contact force and feed rate. The AAK HD is ideal for demanding grinding applications with a heavy matrial removel and offers the highest process quality from a single source. The system design is compact and light. The enormously durable grinder is designed for industrial use and delivers twice the output of standard devices, 24 hours a day, 7 days a week.

Surface treatment: Grinding, deburring
All materials: Steel, aluminum, titanium, magnesium, carbon,
plastic, wood, ceramic,...







### GLOBAL NOVELTY

# GRINDING PACKAGE SOLUTION FOR INDUSTRY 4.0

- User-friendly industrial package solution
- Robot-compatible grinder combined with all the benefits of ACT system cooperation
- · For all industries and materials

### QUICK, FLEXIBLE, SAFE

- High performance and functionally optimized system for immediate integration
- Rapid job modulation directly by the end user
- Optimal functionality, productivity and process reliability

## **CONTROL OF ALL PROCESS PARAMETERS**

- Contact force on the surfaces in an integrated system solution
- Feed rate of the robot
- · Rotation speed of the angle grinder

#### **TOP QUALITY**

- Precisely even surface texture thanks to a process-optimized package solution
- No post-processing
- The highest quality level 24 hours a day,
   7 days a week

COMPACT AND SIMPLE

PRECISE APPLICATION OF FORCE

**DEVICES ARE ARTIFICIALLY CONDITIONED** 



Control of the feed rate

Control of the contact force on surfaces by ACT

Angle grinder with doubled output

Control of the rotation speed

#### **SPECIFICATIONS**

Ordercode	AAK/601
Max. force (push/pull) [N]	500
Stroke [mm]	48
Dimensions [mm]	Max. 343 x 299 x 354 Bolt circle ISO 9409-1-80-6-M8 standard flange ø80
Dead weight [kg]	~ 20
Power supply	<ul> <li>24 V (DIN-track)</li> <li>380 - 500 V AC (frequency inverter)</li> <li>ø8 mm air supply</li> <li>Max. 7 bar, 30µm, ISO 8573-1 Kl.3 (oil- &amp; water free)</li> </ul>
Max. speed [rpm]	8,500
Motor power (S3) [W]	4,000
Motor peak power (S2) [W]	5,900
Grinding disc	M14 drive Spindle thread: fits up to ø7" (ø180mm), with ø22.2mm (ø7/8") drill-hole
Air consumption [l/min]	5 – 10
Ambient temperature during operation [°C]	+5 +45
Protection class	IP65 / if equipped with adequate filters

