ROLL SHOP MACHINERIES AND EQUIPMENT

COTS GRINDING MACHINES







COTS MOUNTING DEVICES



TOP ROLLER TESTING DEVICES



AGV AUTOMATIC GUIDED VEHICLE





SINCE 1970

Asteks has been servicing to textile sector since 1970. The company persistency of the quality in the mill. The machineries, those are has carried up to date its experience and the quality without leaving the core principles set at its establishment. The production takes drawing and combing frames, should technically be competent. place in Istanbul / Turkey at its modern factory having 6.000 m² close area in 11.000 m² open land. Through the implementation ASTEKS, by the experience gained along the years, is in the position of restructuring strategy introduced in 1997 the company has gained the corporate identity. Asteks, who has reliability in both approaches, follows and introduces new technologies.

exports to almost 30 countries among where there are machine manufacturers on a global scale.

The roll shop facilities have very important task in maintaining the

to de-mount&mount and grind the cots on ring spinning, roving,

to design and manufacture the machineries and automations used at its own cots & aprons production line shaping, sizing, finishing domestic and international markets, applies modern management in to top quality level. The company utilize this valuable experience, combining with the latest technology, in manufacturing roll shop machineries like cots grinding machine, UV cots surface treatment The company has around 75% market share in Turkey and also machine, mounting&de-mounting devices and all others.



COTS GRINDING MACHINES



203-SF **SMART FEEDING SYSTEM**





202-AFT MAGAZINE TYPE AUTOMATIC **FEEDING - TWIN DIRECTIONS**



201-AF MAGAZINE TYPE **AUTOMATIC FEEDING**



201-MTL MANUAL FEEDING -TEXTURIZING- DIAMETER MEASUREMENT BY LASER

201-M MANUAL FEEDING -MULTI FUNCTIONAL

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203-SF

SMART FEEDING SYSTEM

This is the cots grinding machine with it's fully automated and high performance features with its two heads developped for the large amount of spinning capacity factories. Labour free operation with it's smart system.



TECHNICAL FEATURES

- Cots' diameter measuring system by laser.
- Top roller rotating motor with servo control.
- Linear sliding cradle traverse system by servo control.
- Grinding stone motor with inverter control.
- Control panel with HMI 8 inch touchmatic screen.
- Automation system controlled by PLC.
- Grinding stone with enchased structure for rubber cots grinding
- Suction unit, top roller holding and stone grinding apparatus.

ADVANTAGES

The Smart Feeding System with Double Magazines; it offers the comfort in loading big no.of top rollers in to the specially designed feeding unit just by pouring off, at once, instead of the manual, time consuming work of alligning them in to the magazine. It makes the operation very easy for the users and provides grate saving in time and labour.

Cots' Diameter Measuring System by Laser; by measuring the outer diameter of the cots to be processed it maintains to perform the grinding at the range of the outer diameter determined. The cots with the diameter smaller or bigger than the dimension range determined are separated automatically. Since the separation is done before the grinding section of the machine the productivity of the machine is not affected.

Automatic Grinding System; It offers significantly high efficient performance with it's double magazine feeding system by fully automated grinding process from beginning to the end, allowing the operator to do the other jobs,

Touch Screen Control Panel; It provides to manage the whole process by allowing very easy setting input for the several parameters like grinding amount on the cots' surface, traverse speed, the rotation speed of cots holding bar, polishing period and the others in accordance with the maintenance team decision on the setting value. Additionally, it offers the option in

Automatic Stone Grinding System; The grinding on the stone can be done automatically, fast and without any hassle only by the instruction given over the touch screen panel with no additional mehanical work, very easily.

Automation System Controlled by PLC; enables tailor-made settings for all elements.





Touch Screen Control Panel



Automatic Stone Grinding System

MACHINE

Height	2.000 mm
Lenght	1.500 mm
Width	1.500 mm
Weight	900 kg

FEEDING UNIT

Height	1135 mm
Lenght	975 mm x 2 sets
Width	915 mm x 2 sets
Weight	450 kg x 2 sets

WORKING PARAMETERS

19x32x29 mm

800-1000 top rollers / hour

	PROCESSING	RANGE
0,02	MIN.	0.1

Ra<1.2

MIN.	
GRINDING	26
DIAMETER	20

150 mm

201-SF

SMART FEEDING SYSTEM This is the cots grinding machine with it's fully automated and high performance features with single head. Labour free operation with it's smart system.



TECHNICAL FEATURES

- Cots' diameter measuring system by laser.
- Top roller rotating motor with servo control.
- Linear sliding cradle traverse system by servo control.
- Grinding stone motor with inverter control.
- Control panel with HMI 8 inch touchmatic screen.
- Automation system controlled by PLC.
- Grinding stone with enchaced structure for rubber cots grinding
- Suction unit, top roller holding and stone grinding apparatus.

ADVANTAGES

The Smart Feeding System with Magazine; it offers the comfort in loading big no.of top rollers in to the specially designed feeding unit just by pouring off, at once, instead of the manual,time consuming work of alligning them in to the magazine. It makes the operation very easy for the users and provides grate saving in time and labour.

Cots' Diameter Measuring System by Laser; by measuring the outer diameter of the cots to be processed it maintains to perform the grinding at the range of the outer diameter determined. The cots with the diameter smaller or bigger than the dimension range determined are separated automatically. Since the separation is done before the grinding section of the machine the productivity of the

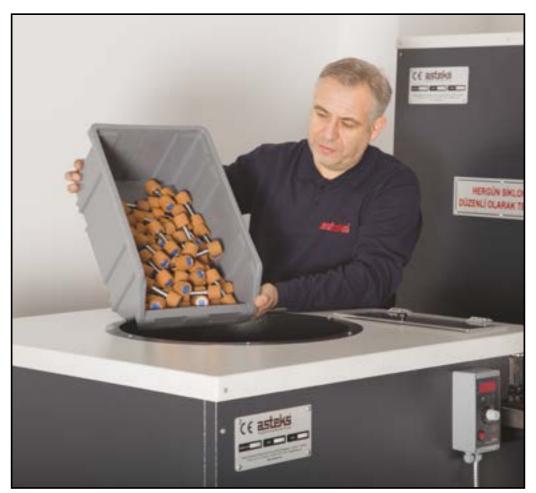
machine is not affected.

Automatic Grinding System; It offers significantly high efficient performance with it's magazine type feeding system by fully automated grinding process from beginning to the end, allowing the operator to do the other jobs, meantime.

Touch Screen Control Panel; It provides to manage the whole process by allowing very easy setting input for the several parameters like the grinding amount on the cots' surface, traverse speed, the rotation speed of cots holding bar, polishing period and the others in accordance with the maintenance team decision on the setting value. Additionally, it offers the option in language setting.

Automation System Controlled by PLC; enables tailor-made settings for all elements.

Made in Turkey



Smart Feeding System



40 mm

Touch Screen Control Panel

MACHINE

2.000 mm	Height	
1.500 mm	Lenght	
1.500 mm	Width	
850 kg	Weight	

FEEDING UNIT

I EEDING GIVII		
1.100 mm		
980 mm		
920 mm		
460 kg		

WORKING PARAMETERS

	top rollers / hour	
MAX.TOP ROLL Can be fed th Feeding systi	ROUGH SMART	150

19x32x29 mm

PROCESSING RANGE 0,02 MIN.

<1,2	DIAMETER		24 mm	Ē
IDING L		4	00 mm	

VIEW ON FRONT

202-AFT

MAGAZINE TYPE DIRECTIONS

This is the cots grinding machine with it's two functional heads developped for the large amount of spinning capacity factories. By twin direction feature, long cots for draw frames and combers can be processed on the other side of the machine.

AUTOMATIC FEEDING - TWIN

Automatic Grinding Section 1.400 mm 850 mm 1.370 mm 720 kg

WORKING PARAMETERS



19x32x29 mm 800 - 1.200

asteks

0.02 Ra<1,2

PROCESSING RANGE

150 mm

TECHNICAL FEATURES

- Top roller rotating motor with servo control.
- Linear sliding cradle traverse system by servo control.
- Grinding stone motor with inverter control.
- 2 sets of control panel with HMI 8 inch touchmatic screen.
- Automation system controlled by PLC.
- Grinding stone with enchased structure for rubber cots grinding.
- Suction unit, top roller holding and stone grinding aparatus.

ADVANTAGES

The Feeding System with Double Magazine; the productivity double.

significantly high efficient performance with it's double magazine feeding sytem by the fully automated grinding progress from beginning to the end, allowing the operator

Touch Screen Control Panel; It provides to manage the whole process by allowing very easy setting input for the parameters like

to do the other jobs, meantime.

the grinding amount on the cots' surface, by doubled size loading capacity, it makes traverse speed, the rotation speed of cots holding bar, polishing period and the others Automatic Grinding System; It offers in accordance with the maintenance team's decision on the setting value. Additionally, it offers the option in language setting.

> Automation System Controlled by PLC; enables tailor-made settings for all elements.



HMI Control Panel



Double Magazine Automatic Feeding System



Long Drafting Cots (for DRAW FRAME and COMBERS) Grinding System



*optional:Smart Feeding (SF) system is applicable

201-AF

COTS GRINDING MACHINES

roving ,draw frame , comber) in a spinning preferred machine. User friendly design.

Offering grinding on all type of cots (spinning, factory on the same machine. One of the most









Long cots for Drawing and Combing Frames can be processed on the same machine without any complicated, time consuming conversions needed.

1.760 mm 850 mm 1.370 mm 740 kg

WORKING PARAMETERS

19x32x29 mm 400 - 600 top rollers/hou

0,02

PROCESSING RANGE

400 mm

TECHNICAL FEATURES

- Cot holder's motor controlled by inverter.
- Linear sliding cradle traverse system by inverter control.
- Grinding stone motor with inverter control.
- Control panel with HMI 8 inch touchmatic screen
- Automation system controlled by PLC.
- Grinding stone with enchased structure for rubber cots grinding
- Suction unit, top roller holding and stone grinding apparatus

ADVANTAGES

The Feeding System with Magazine; high loading capacity by magazine, it makes the operation very easy for the users.

Multi Size Combined Grinding System; offers flexibility in processing long cots for Drawing and Combing Frames, , as well as short cots for Ring Frames and Roving Frames on the same machine without any complicated, time consuming conversions needed

Automatic Grinding System; It offers significantly high efficient performance with it's magazine feeding sytem by the fully automated grinding progress from beginning to the end, allowing the operator to do the other jobs, meantime.

Touch Screen Control Panel; It provides to manage

the whole process by allowing very easy setting input for the parameters like the grinding amount on the cots' surface, traverse speed, the rotation speed of cots holding bar, polishing period and the others in accordance with the maintenance team decision on the setting value. Additionally, it offers the option in language setting.

Cot Holder Controlled By Inverter, processing table controlled by inverter provides flexibility in setting cot holder's rotation speed and traverse period to maintain the cot surface roughness (Ra) value targetted in accordance with the yarn count produced and the cot's hardness.

Automation System Controlled by PLC; enables tailor-made settings for all elements.

201-MTL

MANUAL -**TEXTURIZING-DIAMETER MEASUREMENT** BY LASER

GRINDING MACHINES





1.400 mm 850 mm 1.370 mm 720 kg

WORKING PARAMETERS 45x65x34 mm

250 top rollers/hou

This is the grinding machine designed to

process the cots for texturizing machines and

long staple fibers spinning frames. Diameter

measuring system by laser contributes to

increase the efficiency in the process.

0.02

450 mm

TECHNICAL FEATURES

- Cots' diameter measuring system
- Cots holder's motor controlled by inverter.
- Linear sliding cradle by inverter Grinding stone motor with inverter
- control. ■ The Motor related with Cots'
- Diameter Check is Controlled By Servo
- Control panel with HMI 7 inch touchmatic screen.
- Automation system controlled by PLC.
- Grinding stone with enchased structure for rubber cots grinding.
- Suction unit, top roller holding and stone grinding apparatus.

ADVANTAGES

Cots' Diameter Measuring System by Laser; measures the cots' diameter, eliminating the operator checking the diameters manual before the process and thus maintaining higher efficiency by saving the labour.

Automatic Grinding System: Following the operator sets the cot on the holding unit, the machine completes the grinding automatically in compliance with the settings input over the touch screen by just pushing the start button.

Touch Screen Control Panel; It provides to manage the whole process by allowing very easy setting input for the parameters like the grinding amount on the cots' surface, traverse speed, the rotation speed of cots holding bar, polishing period and the others in accordance with the maintenance team's decision on the setting value.Additionally, it offers the option in language setting.

Cot Holder Controlled By Inverter; processing table controlled by inverter provides flexibility in setting cot holder's rotation speed and traverse period to maintain the cot surface roughness (Ra) value targetted in accordance with the yarn count produced and the cot's hardness.

Automation System Controlled by PLC; enables tailor-made settings for all elements.

Stop-Start System: The grinding stone stops while the cot is placed by the operator. The stone starts to rotate only by the push on to the start buton. It maintains the work safety and energy

Low Energy Consumption; offers economical process by lower energy cost.

201-M

MANUAL MULTI **FUNCTIONAL**

Offers high flexibility and wide multi functionality by the ability to process all kind of cots including Ring&Roving&Draw Frames, Combers, Texturizing, Open-End, Finisher, Drafting Rollers in both short and long staple fibre spinning.

By the effect of UV irradiation the minor burs on the cots surface incurred at grinding process are cleared off. The change in fibre characteristic and climatisation and some other factors, that can not under control easily, especially in the factories processing PES fibres and blends can be effective in lapping on cots. UV treatment may minimize that lapping tendency. Also, UV treatment machine supports to maintain better performance with the cots on super high speed Vortex machines after grinding process.

UV-302

COTS SURFACE TREATMENT by UV

AUXILIARIES AT ROLL SHOP







850 mm WORKING PARAMETERS

19x32x29 mm 19x51x32 mm 200 top rollers/ho 200

0,02 Ra<1,2

PROCESSING RANGE

100 mm

TECHNICAL FEATURES

- Cots holder's motor with inverter control.
- Grinding stone motor with inverter control.
- Control panel with HMI 8 inch touchmatic screen.
- Automation system controlled
- Grinding stone with enchased structure for rubber cots grinding
- Suction unit, top roller holding and stone grinding apparatus

ADVANTAGES

The Ability to Process All Kind of Cots; Ring &Roving&Draw Frames, Combers, Texturizing, Open-End, Finisher, Drafting Rollers in both short and long staple fibre spinning.

Touch Screen Control Panel; It provides to manage the whole process by allowing very easy setting input for the parameters like the grinding amount on the cots' surface, traverse speed, the rotation speed of cots holding bar, polishing period and the others in accordance with the maintenance team's decision on the setting value. Additionally, it offers the option in language setting.

Linear Sliding Cradle Traverse System by Inverter Control; avoids the defect with conical grinding at the change of holder settings.

Cots Holder Controlled By Inverter;

perfect cot's surface maintained by processing table under inverter control.

Automation System Controlled by PLC; offers ability in tailor-made setting.

By the Ability in Setting of the Period When the Stone Polishing on the Rubber Cots; perfect cot's surface roughness level.

By Digital Control on Setting in Grinding Amount; high dimensional precision

Low Energy Consumption; 2,9kW



Higher higher productivity in the process by higher capacity feeding shelf



User friendly by its touchmatic control panél



1.350 mm 700 mm 1.000 mm



TECHNICAL FEATURES

150 kg

- Higher productivity in the process by higher capacity feeding shelf what can accomodates 45 pcs top
- Automation in openning and closing of feeding shelf.
- The regulation on cots rotation speed by servo motor control during UV application.
- Flexibility by the option for 1000 or 2000 Watt UV power application as per the operator's decision
- Very easy maintenance and change of the lamp by the ergonomical design of the machine.
- By the start-stop function of UV application, the UV lamps are turned-off when the feeding shelf is to be opened. Having the feature with the lamps are turned-on only after the feeding shelf is closed, sets extra care on health safety, energy saving and extended life time of the UV lamps.
- Effective irradiation by specially designed reflectors and 2000 Watt UV lamp.

ADVANTAGES

Following the grinding on the cots used in synthetic fibres and blends spinning;

Decrease in the tendency of lapping

Higher efficiency in start-up after grinding by more efficient piecing and thus saving in labour. Contribution in to yarn quality and production

Superior running performance and better efficiency on super high delivery speed Air Jet Spinning systems after cots grinding process

11 10

AUXILIARIES AT ROLL SHOP

TOP ROLLER LUBRICATING DEVICE (AUTOMATIC)

WITH AUTOMATIC DOSING

TECHNICAL FEATURES

- Lubricates the top rollers of ring spinning frames and
- Under control the right amount of the lubricant that should be applied by automatic dosing system.
- High efficiency by the lubrication at the same time on both sides of the top rollers.
- User friendly operation; the operator only needs to feed the top roller on to the device, then, automatically, lubrication on both side takes place, at the same time.





1.200 mm





AUXILIARIES AT ROLL SHOP

TOP ROLLER LUBRICATION **DEVICE** (MANUAL)

TECHNICAL FEATURES

- Lubricates the top rollers of ring spinning frames and roving frames.
- The control on right amount of lubrication is maintained by the dosing system manually set.
- The control on right amount of lubrication is maintained by the dosing system manually set. User friendly at the manual operation.



740 mm

220 mm

450 mm

Weight 38 kg

MANUAL COTS MOUNTING DEVICES

Cots for Ring Spinning, Roving Frames, Open-End Spinning Machines MANUAL COTS **MOUNTING**

It is used for mounting the bear top rollers in to the cots for ring spinning, roving frames and Open-End spinning machines. It is a rather economical solution. The cots centering bar enables a precise application under control. The adaptors suitable to the top rollers in the factory are supplied together.



COTS MOUNTING **DEVICES**

PNEUMATIC COTS MOUNTING DEVICE

Cots for Ring Spinning, Roving Frames, Open-**End Spinning Machines**

By Pneumatic Mounting Devices, the top rollers for ring spinning and roving frames are processed. The cots centering bar and push restriction element maintain under control and reliable operation. It is supplied together with adaptors for mounting&de-mounting.





910 mm 300 mm 450 mm Weight 38 kg

COTS **MOUNTING DEVICES**

TECHNICAL FEATURES

are supplied together.

■ By hydraulic system, the mounting operation is

executed in a stable momentum, keeping the progress

■ The adaptors suitable to the top rollers in the factory

HYDRAULIC COTS MOUNTING DEVICE (HORIZONTAL DESIGN)

Mounting & De-Mounting for the cots for Draw Frames and Combers

It is used for de-mounting and mounting the bear top rollers in to cots for Draw Frames, Lap Formers and Combers.

It is used for de-mounting and mounting the bear top rollers in to cots for Texturizing , Long Stable and Fancy Yarn Spinning Systems.

HYDRAULIC COTS MOUNTING DEVICE (VERTICAL DESIGN)

Cots for Long Stable Spinning and Texturizing Systems

MOUNTING

TECHNICAL FEATURES

- By the vertical design hydraulic system, the mounting operation is executed in a stable momentum, keeping the progress under control better at processing rather big diameter cots like for long stable spinning and texturizing systems.
- The adaptors suitable to the top rollers in the factory are supplied together.
- The cots centering bar enables a precise application under control.

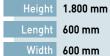


1.000 mm 1.700 mm

360 mm

Weight 215 kg





Weight 120 kg







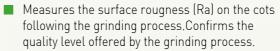


TOP ROLLER TESTING DEVICES

Weight 20 kg

TOP ROLLER CONCENTRICITY MEASURING DEVICE

- Measures the concentricity on the rubber cots right and left on the top roller for ring spinning and roving frames.
- High accuracy and easy testing



■ Ra testing device is supplied with the stand for the cots for ring spinning, roving and draw frames.

COTS SURFACE ROUGHNESS (Ra) TESTING DEVICE

TOP ROLLER TESTING DEVICES



Height 265 mm

Lenght 477 mm

Width 245 mm

Weight 40 kg





Height 280 mm

Lenght 120 mm

Width 160 mm

Weight 5 kg

TOP ROLLER

TOP ROLLER TESTING DEVICES

TOP ROLLERS CONICITY MEASURING DEVICE

Indentifies the risk of the conicity on the cots for drawing frames and combing frames following the grinding process.

 Precise and easy testing provided by the linear sliding cradle system



RUBBER COT HARDNESS TESTER

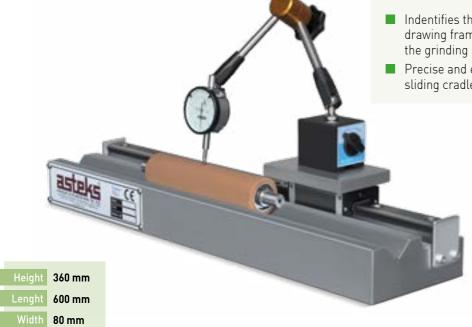
(SHORE METER)

It is used to measure shore hardness level on rubber cots. In compliance with DIN regulations that tests at +/- 3 Sh tolerance at Shore A scale defined.

TOP ROLLER TESTING DEVICES

COTS
DIAMETER
MEASURING
DEVICE
(CALIPER)

It is used to define the cots' dimension. By it's digital structure a high accuracy measurement is applied.





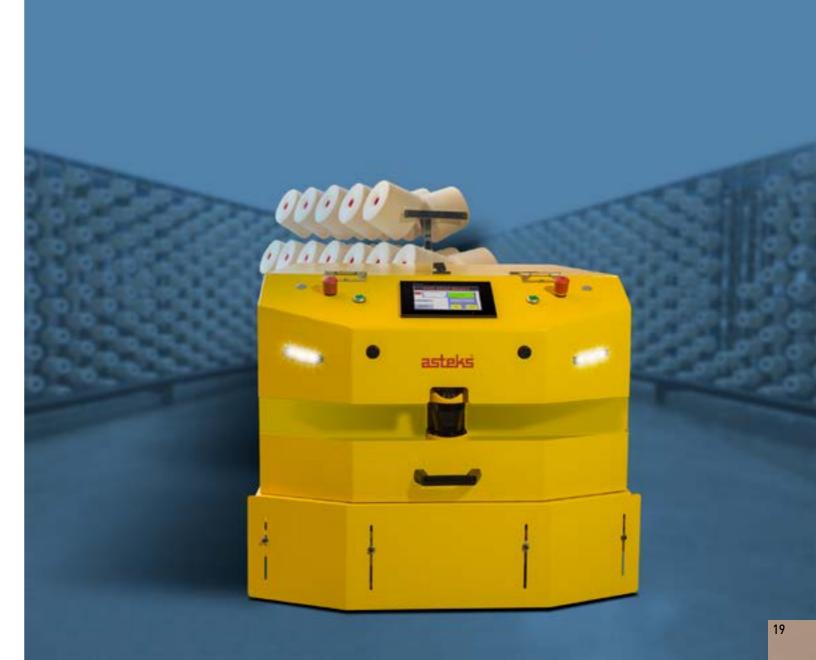
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TRANSPORTATION VEHICLES

TOP ROLLERS CARRIAGE Provides the top rollers to be collected from the ring spinning frames and/or roving frames and to be transported forward and back between roll shop and the machines.



AGV
AUTOMATIC
GUIDED
VEHICLE



TRANSPORTATION VEHICLES

101-AGV AUTOMATIC GUIDED VEHICLE

AGV (Automatic Guided Vehicle) are the vehicles carrying goods and/or trolley with its man free, automatic steering system.





610 mm
760 mm
1.210 mm
317 kg

TECNICAL FEATURES OF 101-AGV

- Ability to handle 2 (and optionally 4) tons load
- Programmable to stop and start at the station determined.
- Enable to turn over 360 degree even in a limited narrow area.
- Runs on the route set with magnetic tapes.
- Auidable alarm system with lightening flash.
- Stops when there is an obstacle on front and re-starts when the obstacle is moved away
- Technology applied with AC motor and Inverter.

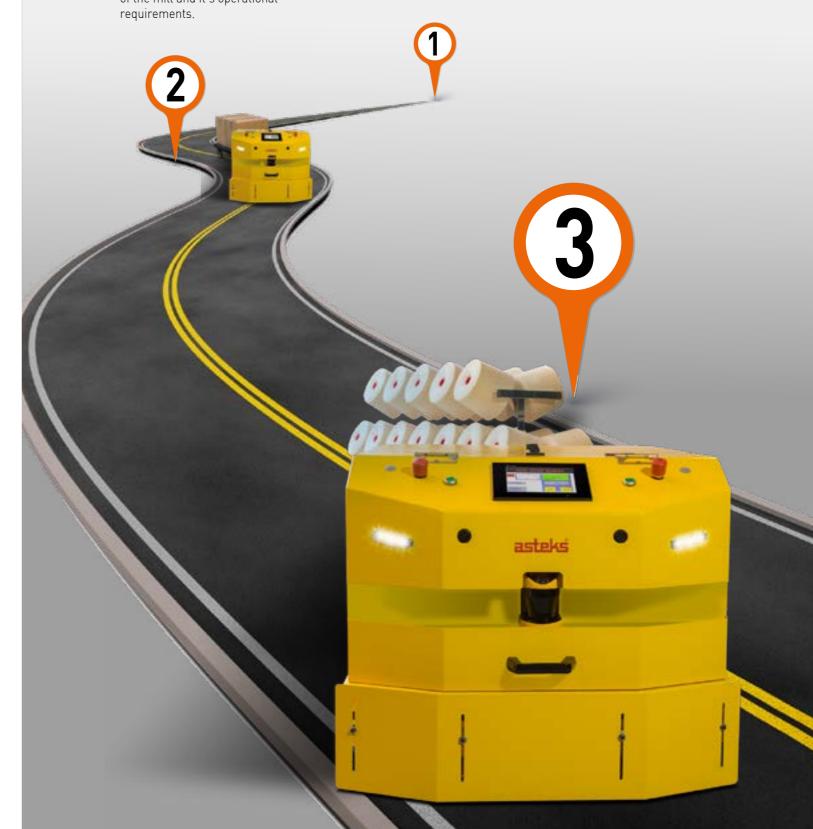
ADVANTGES OFFERED BY 101-AGV

- High technology applied with AC motor and inverter.
- Cost reduction while maintaining the standardization on the operation.
- Planning on product logistic and enhaced tracking.
- Increase in production efficiency.

Flexibility with running single or group of vehicles together being synchronised each others.

- AGV are indoor advanced transportation systems what can offers solutions with load carriage in variety and in different application fields.
- AGV offers increase in profitability provided by the increase in efficiency and decrease in cost in production.
- Tailor-made designing and sketching according to the physical conditions of the mill and it's operational requirements

101-AGV AUTOMATIC GUIDED VEHICLE TRANSPORTATION VEHICLES



BY OUR ROLL SHOP MACHINERIES, WE OFFER YOU THE LATEST TECHNOLOGY ALONG WITH

AND RELIABILITY...





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