ROLL SHOP MACHINERIES AND EQUIPMENT









SINCE 1970

Asteks has been servicing to textile sector since 1970. The company has carried up to date its experience and the quality without leaving the core principles set at its establishment. The production takes place in Istanbul / Turkey at its modern factory having 6.000 m ² close area in 11.000 m $^{\,2}$ open land. Through the implementation of restructuring strategy introduced in 1997 the company has gained the corporate identity. Asteks, who has reliability in both domestic and international markets, applies modern management approaches, follows and introduces new technologies.

The company has around 75% market share in Turkey and also 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

persistency of the quality in the mill. The machineries, those are to de-mount&mount and grind the cots on ring spinning, roving, drawing and combing frames, should technically be competent.

ASTEKS, by the experience gained along the years, is in the position to design and manufacture the machineries and automations used at its own cots & aprons production line shaping, sizing, finishing 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 machine, mounting&de-mounting devices and all others.

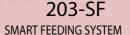




www. asteks.com www.ptdm55.com www.phutungdetmay55.com

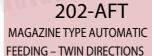
COTS GRINDING MACHINES













201-AF MAGAZINE TYPE **AUTOMATIC FEEDING**



201-MTL MANUAL FEEDING -201-M MANUAL FEEDING -TEXTURIZING- DIAMETER MULTI FUNCTIONAL MEASUREMENT BY LASER

AUXILIARIES	ΑT
ROLL SHOP	

302-UV COTS SURFACE TREATMENT BY UV	William mass	10
TOP ROLLER LUBRICATING DEVICE (AUTOMATIC)	MM M = P =	12
TOP ROLLER LUBRICATION DEVICE (MANUAL)		12

COTS MOUNTIN DEVICES

MANUAL COTS MOUNTING DEVICE	1
PNEUMATIC COTS MOUNTING DEVICE	1
HYDRAULIC COTS MOUNTING /HORIZONTAL DESIGN (mainly for long cots for	
drawing frames and combing machines)	1
HYDRAULIC COTS MOUNTING DEVICE / VERTICAL DESIGN (mainly for the cots for	
texturizing machine and long stable spinning systems)	1

TOP ROLLER **TESTING DEVIC**

TOP ROLLER CONCENTRICITY MEASURING DEVICE	16 16
COTS SURFACE ROUGHNESS (Ra) TESTING DEVICE	17
RUBBER COTS HARDNESS TESTER (SHORE METER)	17
COTS DIAMETER MEASURING DEVICE (CALIPER)	17

TRANSPORTATION **VEHICLES**

TRANSPORTATI	O YOP ROLLERS CARRIAGE	 18
VEHICLES	101-AGV AUTOMATIC GUIDED VEHICLE	19-2
iuda muu.	ungdetmayəə.com	

COTS GRINDING MACHINES SYSTEM

203-SF

SMART FEEDING

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, meantime.

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 language setting.

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.



The Smart Feeding System with Double Magazines



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

GRINDING	19x32x2 0 n	GRINDING SENSIT	V.C.02
CAPACITY	800-1000 to	OBURFACE ROUGHI	Ra<1,2

MIN.		MAX.
GRINDING	26	GRINDIN

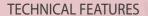
COTS GRINDING MACHINES SYSTEM

201-SF

SMART FEEDING

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.





- 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 Feedýng System



Touch Screen Control Panel

MACHINE

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

FEEDING UNIT				
1.100 mr				
980 mm				
920 mm				
460 kg				

WORKING PARAMETERS

nght	1.500 mm	WORKING PARAMETERS				PROCESS.	ING RAN	GE
/idth eight	1.500 mm 850 kg	GRINDING CAPACITY	19x32x29n 400-500 top rollers / ho	SURFACE R	SENSITIVI 0,02	MIN. GRINDIN DIAMETE	G 24 mn	MA GR DIA
ING I	UNIT	MAX.TOP R	OLLER LEN		MAX.GRIND	ING LENG		
eight	1.100 mm	CAN BE FEE FEEDING SY	THROUGH YSTEM	150 _{nm}			400 _{nm}	
nght	980 mm							
/idth	920 mm							
eight	460 kg							
	920 mm 460 kg	VALANI	Juorn		www	v.asteks.co	m/www.pl	nutur

COTS GRINDING MAGAZINE TYPE MACHINES FEEDING - TWIN DIRECTIONS

VIEW ON FRONT

202-AFT

AUTOMATIC 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.

HMI Control Panel



Double Magazine Automatic Feeding System



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



WORKING PARAMETERS

PROCESSING RANGE

GRINDING	19x32x2 19 n
CAPACITY	800 - 1.200 top rollers/hou

0.02

ADVANTAGES

the productivity double.

The Feeding System with Double Magazine;

by doubled size loading capacity, it makes

Automatic Grinding System; It offers

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

to do the other jobs, meantime.

1.400 mm 850 mm 1.370 mm 720 kg

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.
- 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.

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



*optional:Smart Feeding (SF) system is applicable

COTS GRINDING **MACHINES**

201-AF

COTS GRINDING MACHINES

Offering grinding on all type of cots (spinning, roving ,draw frame , comber) in a spinning factory on the same machine. One of the most preferred machine. User friendly design.

asteks -- astoks --







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

WORKING PARAMETERS PROCESSING RANGE 19x32x29n

51_{mm}

TECHNICAL FEATURES

740 kg

1.760 mm

850 mm

1.370 mm

- 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

400 - 600

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, 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.

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.

201-MTL

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

COTS GRINDING **MACHINES**





1.400 mm 850 mm WORKING PARAMETERS

1.370 mm 720 kg

control.

Servo.

45x65x34n 25@op rollers/hou

0,02

PROCESSING RANGE

100_{nm}

450_{nn}

TECHNICAL FEATURES

- Cots' diameter measuring system by laser.
- Cots holder's motor controlled by inverter.
- Linear sliding cradle by inverter ■ Grinding stone motor with inverter
- The Motor related with Cots' Diameter Check is Controlled By
- 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 effi ciency by saving the labour.

Automatic Grinding System: Following the operatör 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 man age the whole process by allowing very easy set ting input for the parameters like the grinding amount on the cots' surface, traverse speed, the rotation speed of cots holding bar, polishing pe riod and the others in accordance with the main tenance team's decision on the setting value.Ad

ditionally, 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 saving.

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

COTS GRINDING

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.







WORKING PARAMETERS

850 mm

19x32x29 19x51x32 200

0,02

Ra<1,2 DIAMETE

PROCESSING RANGE

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

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.

COTS SURFACE

UV-302_{AUXILIARIES} **ROLL SHOP** by UV



Higher higher productivity in the process by higher capacity feeding shelf



User friendly by its touchmatic control panel



1.350 mm 700 mm 1.000 mm



TREATMENT

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 cost.

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

AUXILIARIE LUBRICATING DEVICE AT ROLL SH

TOP ROLLER (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.







AUXILIARIE: TOP ROLLER LUBRICATION ROLL SHOP

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.





MANUAL COTS MOUNTING DEVICES

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

MANUAL COT MOUNTING **DEVICES**

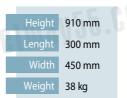
It is used for mounting the bear top rollers in to the cots for ring spinning, roving frames and Open-End spinning machines. It is a rather economical solution. The cots centering bar enables a precise application under control. The adaptors suitable to the top rollers in the factory are supplied together.

COTS **MOUNT 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.





COTS MOUNTIN DEVICES

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

TECHNICAL FEATURES

are supplied together.

under control.

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

COTS MOUNTING DEVICES

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.

tmay55.com



Height 1.000 mm

Lenght 1.700 mm

Weight 215 kg

((astaks









1.800 mm

600 mm

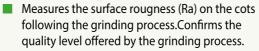
600 mm

Weight 120 kg

TOP ROLL TESTING DEVICES

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 DEVICI**



477 mm 245 mm 40 kg





280 mm 120 mm 160 mm



TOP ROL 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 www.phutungdetmay55.com sliding cradle system



RUBBER COT HARDNESS TESTER

> (SHORE METER)

TOP ROLLER **TESTING**

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. www.phutungdetmay

TOP ROLL cots

DIAMETER **MEASURING DEVICE** (CALIPER)

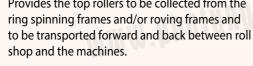
It is used to define the cots' dimension. By it's digital structure a high accuracy measurement is applied.



TRANSPORTA TOP **VEHICLES**

www.phutungaetmayo

ROLLERS CARRIAGE Provides the top rollers to be collected from the shop and the machines.

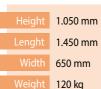






H- ---

- 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
- Easy usage provided by the ergonomic design.
- Following the grinding process, maintains delicacy in the transportation without any harm on the surface of the cots that newly treated.
- Provides right keeping conditions for the cots treated at roll shop by preventing direct light affection.





AGV **AUTOMATIC GUIDED VEHICLE**



TRANSPORTA 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.





Height 610 mm Lenght 760 mm Width 1.210 mm Weight 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

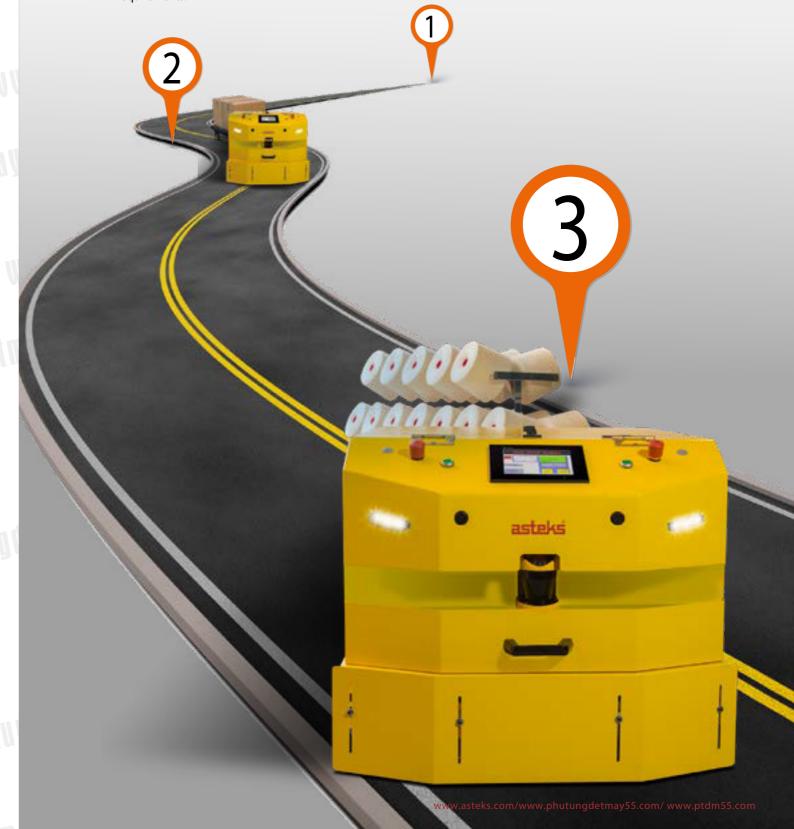
- High technology applied with AC motor and inverter.
- Cost reduction while maintaining the standardization on the operation.
- Planning on product logistic and enhaced tracking.
- Increase in production efficiency.

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 AL

asteks 'S QUALITY AND RELIABILITY





