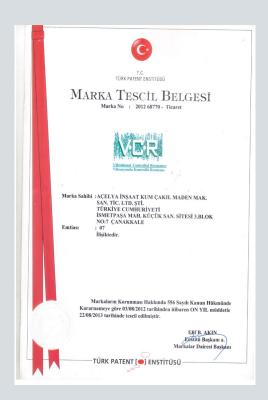


Açelya Machine







ABOUT US



After searching for the productive and high capacity screening, one of the greatest problems of the mining industry as involving in it since 1960, AÇELYA MAKİNA has set out with the principle of "providing worldwide standardised solutions to its customers by using the latest technologies" and has become a recognised company in micronized screening in a short period both in Turkey and around the world.

AÇELYA MAKİNA first started manufacturing in 2014, in a 300m2 workplace in Çanakkale and moved to a new 1000m2 plant in a town of Çanakkale, Ezine after a while.

AÇELYA MAKİNA has developed a polyurethane screening cloth technically suitable for its own screening machines and it has led the way as producing and using this technology in Turkey. Thus, it has greatly contributed to product concentration process in metal mining as screening until 45 microns for wet and dry processes.

Designing screening machines and developing featured projects with its dynamic and explorer team, AÇELYA MAKİNA can become your solution partner in industries like mining, agriculture, chemical building materials and in all problematic fields that needed processes of resolving and sizing granule.

OUR VISION

Combining a century experience with the energy of third generation, our company will continue its efforts and preserve its status for achieving its goals and for meeting the needs and demands of the industry without compromising its principles of quality, customer satisfaction and representing our country with a strong presence in abroad. Continuing its works in this context, AÇELYA MAKİNA aims to improve its quality to the highest level as developing the technology of its world standardised products.

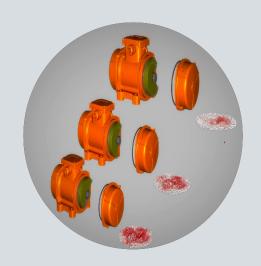
OUR MISSION

Within the industry that it provides services, such as metal mining concentration plants, building chemicals manufacturing plants and all other industries needed micronized screening, with the production of equipments for key points, it offers a solution profile, qualified personnel, experienced service network and advantages of a technology at a highest level for customer satisfaction and enhance its growing pace in a most sustainable way.

OUR TECHNOLOGY

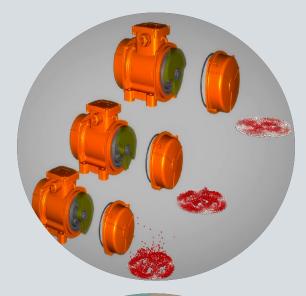
Cloth Driven Vibration Technology

In this technology, vibration occurs only in the screen panel that screening is made. Each unit moves linearly with two vibrational motors. Vibration produced with vibrational motors is delivered with vibration units to the screen panel only made from chrome-steel and/or polyurethane. Vibration is active only in the screen panel. Screen body is not exposed to any dynamic power. In this way, no damage occurs in the screen body.

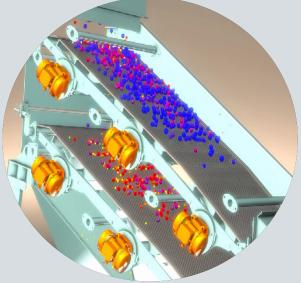


What is V.C.R. ?

Multiple As a result of an instantaneous activation, vibration waves occur as resonance. Thanks to this special technique, the effect of resonance under control observes as the volcanic eruption in the material that swings on the screen surface. Vibration units constitute the base of the V.C.R (Vibrational Controlled Resonance) technology. Each vibrational motors of multiple vibration units produces variety of vibration waves.

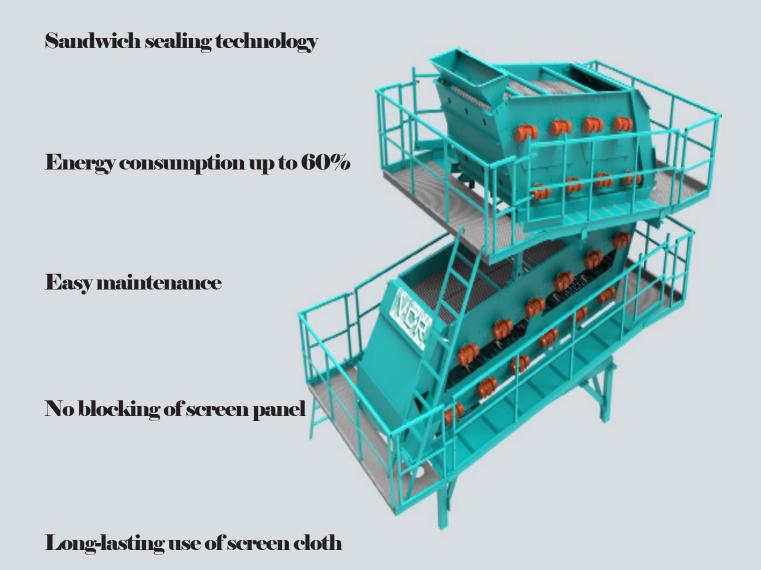






FEATURES & ADVANTAGES

Technical calibration special to the material



Innovative vibration damping technology



High Efficiency Screening

Cloth driven vibration technology and slope adjustment system together determine the flow speed of the material on the screening machine. With this feature, increasing the flow speed of the material, speeder and more efficient screening can be provided.

Energy Consumption up to 60%

Vibration and movement produced for screening process is only for screening and directly related with the screen panel. There occurs no vibration in the body or the other equipments. While increasing the screening efficiency with this way, small motors give low amperage values and consume less energy. Hence, energy is saved.



Vibromotor model (50 Hz)	Centrifugal Force (kg)	Weight (kg)	Input Power (kW)	Nominal Current /Imax (Amp)	Maximum Current for V.C.R./Ivcr (Amp)
300/3 E	321	10	0.25	0.52	0.32
400/3 E	411	10	0.27	0.58	0.36
500/3 E	534	16	0.50	0.96	0.60

FEATURES & ADVANTAGES

Innovative Vibration Damping Technology

There are polyurethane and rubber suspended wedges with variety of features on the side walls and in the chassis of the screening machine.

With the cloth driven vibration technology, the body and the other equipments of the machine are not exposed to the vibration. However, innovative vibration damping technology is developed to hinder the sensation of the low vibration. This technology prevents the negative effect of the vibration to the factory site.





Easy Maintenance

- Replacement of the screen cloth is made in 30 minutes with a special design stretcher system.
- No equipment or component requires greasing in the V.C.R screening machine.
- Without stopping the machine, replacement and maintenance could be made in the event of a motor breakdown.
- Thanks to the maintenance windows located between the decks in the body, the progress between the decks can be observed and interfered easily if necessary.



Technical calibration special to the material

Variety of parameters such as feeding speed, motor frequencies, motor productivity, machine slope are calibrated professionally according to the needs and demands of our customers.

It is possible to control the material amount on the screen surface to be screened.

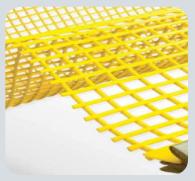
For instance, for conformity to AFS in construction chemicals, the amount is set as disabling the desired number of vibration unit.

Long-lasting use of screen cloth

Vibration technology applied in the V.C.R. screening machine makes volcanic eruptions on the screen panel during the flow of the material and moves through the screen panel with a ninety degree ankle. This process diminishes the friction of the material onto the screen panel. Thus, wearing of panel decreases to the minimum level.

Açelya Makina, to be first in Turkey, develops and applies long-lasting polyurethane screen panel suitable for V.C.R. operating principle, after a long R&D process.





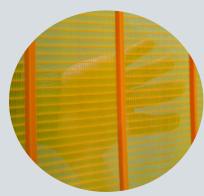
No blocking of screen cloth

Thanks to the constant transmission of high frequency waves directly to the screen panel and resonance under control, even moist and sticky materials do not stick to the screen panel. Hence, no blocking occurs in the screen cloth.









FEATURES & ADVANTAGES

Sandwich sealing is a cord sealing system applied between the screen panel and side walls.



Sandwich sealing provides high efficiency dust and liquid sealing. This technology applied to screen panel hinders the unmeasured material in the main product and provides accurate screening.

Slope Adjustment Systems

According to the use and production purposes of screening machine, different slope ankles can be adjustable with the system in the rear foot of the machine.

Optional hydraulic foot system makes easy and practical to adjust the slope.



Mechanical Foot with Variable Slope Adjustment



Hydraulic Foot (Optional)

VCR-D screening machines screen from -25 microns to 50 mm up to 99% performance in the dry screening systems. According to the characteristics, the granulometry, the size and tonnage of the material the most appropriate model is determined. Thus, the screening machine designed for your need with high efficiency and low processing cost is offered. Ultimately, the parameters of V.C.R. screening machine are diligently calibrated to make screening at the finest and the efficient levels.



In this plant, a single deck and 4 pcs double decks VCR-D screening machines in size of 1500x3000 screen run of mine Pearlite in sizes of 2.4 mm - 1.2 mm - 0.6 mm - 0.3 mm with a capacity of 35 tone/hour.

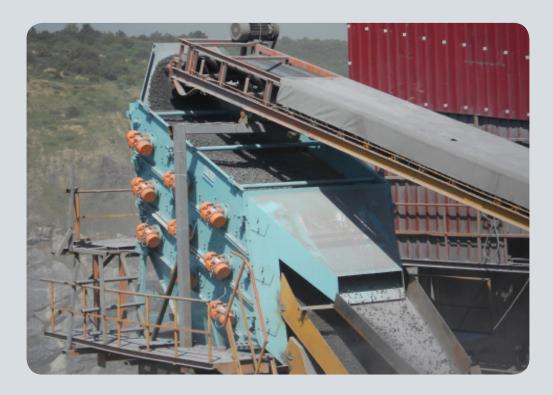


In this plant, a triple decks VCR-D screening machine in size of 1500x4000 screens emery sands in 40-60-80-120 sand sizes with clarity of 99.9%.

DRY SCREENING PLANTS



In this plant, one and a half decks VCR screening machine in size of 1500x4000 and feeder with -50 mm screen Calcium in 850 microns undersize material with a capacity of 22,5 tone/hour.



In this plant, a triple decks VCR-D screening machine in size of 2000x4000 screens Limestone in $5\,\text{mm}$ - $15\,\text{mm}$ - $25\,\text{mm}$ with a capacity of 350 tone/hour.



In this plant, a single deck VCR-D screening machine in size of 1500x6000 screens construction chemicals in -0,710 mm with a capacity of 30 tone/hour.



In this plant, a double decks VCR-D screening machine in size of 1500x6000 screens Natural Pearlite in 3 mm - 5 mm with a capacity of 100 tone/hour.

DRY SCREENING PLANTS





In this plant, a single deck in size of 1500x4000 and three pcs single deck in size of 1500x3000 VCR-D screening machines screen run of mine Pearlite in 2,4 mm - 1,2 mm and 600 microns - 3 microns with a capacity of 35 tone/hour.



In this plant, a double decks VCR-D screening machine in size of 1500x5000 screens Softwood Chips in 5 mm - 50 mm with a capacity of 50 tone/hour.



In this plant, a double decks VCR-D screening machine in size of 1000x3000 screens Olivine in 200 microns - 500 microns with a capacity of 30 tone/hour.



In this plant, one piece VCR-D screening machine in size of 1500x4000 and one piece VCR grill screen moisty Clay in -50 mm with a capacity of 150 tone/hour.



In this plant, one piece VCR screening machine in size of 20000x60000 screens Olivine in 3 mm with a capacity of 100 tone/hour.



VCR-W and VCR-DW series are used for product classification in ore concentration and sand washing plants. Each ore is classified by wet screening from -45 microns to 50 mm as its mineralogical structure and particle liberation size.





WET SCREENING PLANTS

In this plant, 8 grade chromite ore is fed with 36 tone/hour. It is classified as 850 microns, 500 microns and 300 microns by 4 pcs single deck VCR-W screening machines in size of 1500x4000. The ore classified is concentrated on 56 tables and 48-52 grade product has obtained.

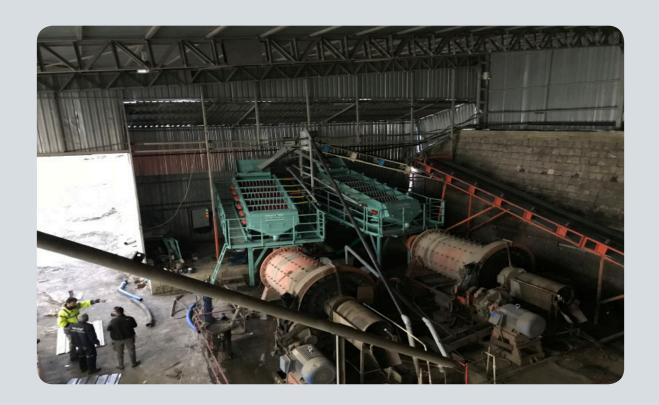






In this plant, 3-3,5 feeding grade chrome wastes are processed. As a system reduced from chrome wastes, a double decks VCR-W screening machine in size of 1500x4000 is used. This machine screens in 800 microns - 500 microns - 300 microns. Chromite ore classified in three groups as 0-300 microns, 300-500 microns and 0,800-3.500 mm is concentrated on 12 oscillating tables as 48 grade with a capacity of 9 tone/day. An average 2700 tons of ore are obtained from ore waste annually.

WET SCREENING PLANTS





In this plant, particle liberation of run of mine chromite needs to be $800\,\mathrm{microns}$. Conventional screening machines screen in $1.2\,\mathrm{mm}$ with feeding a capacity of $16\,\mathrm{tone/hour}$. However, efficient screening has not been detected. Instead of conventional screens, VCR-W screening machines have been placed. Thus, $+800\,\mathrm{microns}$ chromite mills have been fed. As fed the exit of the mills by VCR-W screens, $-800\,\mathrm{microns}$ have been obtained. In this way, all materials undersize $-800\,\mathrm{microns}$ are concentrated on the oscillating tables. With this modification, feeding capacity has reached $48\,\mathrm{grade}$ with a capacity of $25\,\mathrm{tone/hour}$



VCR-DW Dewatering Screening Machine

The machine was design to separate water and metarials that screened with wet screening machines.

Olive Pomace Screening Machine

Olive Pomace is screened with VCR screening machine from 8 mm to protect decanter from foreign objects before the olice pomace is entered the last operation in decanter.



Grape Seed Screening Machine

The grape seed that is grinded and converted to flour with mill machine, is screened from 200 micron to use food industry.



SPACIAL PROJECT

Ball Milles Screening Machine

Ball milles screening machines designed and produced in order to classify used ball milles, privately. Therefore, amount and size of new and old ball miles can be dicided when mill is carry out maintenanced. In addition, time of maintenanced can be decreased to minumum.









In the range of 15-17-22-30 mm ball milles could be screened with 8 ton/hour capacity and %96 screening efficiency.

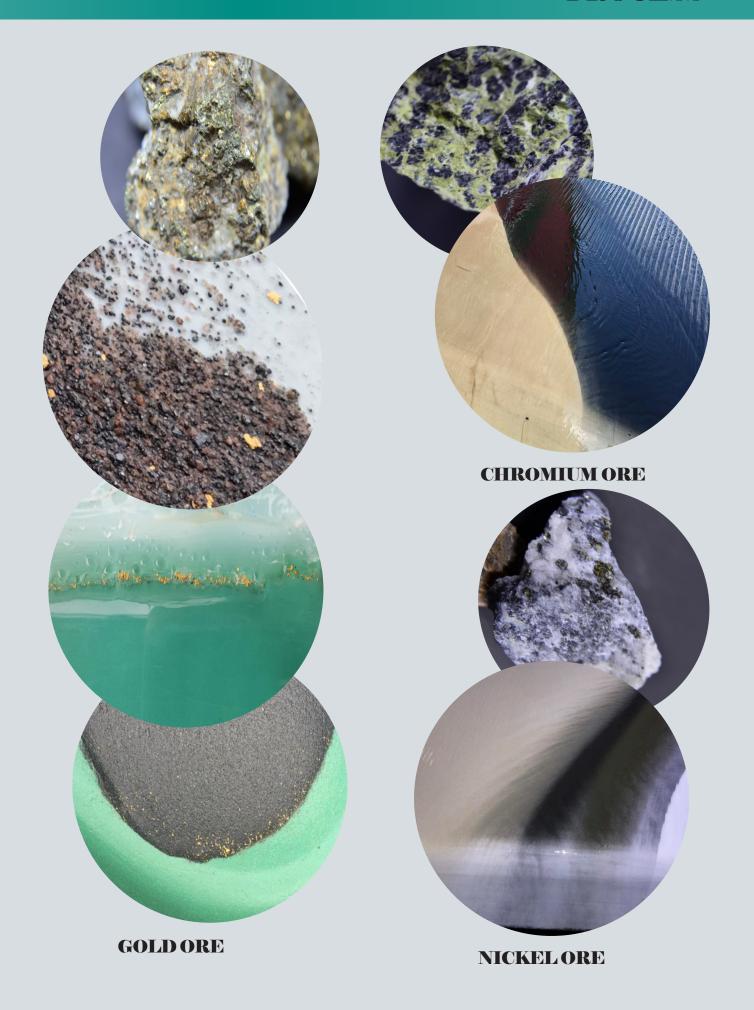
Each mineral has different liberation size according to petrographical and mineralogical features. The mineral has to classify with a selected size in this way density differences between the wall rock and main mineral have to be minumum 20 percent in order to get maximum enrichment process. The number of screening machines and size of screening range can fix on according to types of mettarials and liberation size of minerals.

Special models of V.C.R screening machines that design for enrichment process sieve minerals 1mm to 45 micron. As result of this process, maximum density difference can be occured between the wall rock and main mineral. The mineral which has density difference is fed special enrichment desk. As a result of this process,

Non chemical enrichment process is done.



PHYSICAL MINERAL ENRICHMENT PROCESS



MODELS OF DRY SCREENING MACHINES



VCR-D 103/6

Surface Size: 1.500/3.000

Number of Screen Cloth: 1

Screening Surface Area: 4.5 m²

Number of Vibromotor: 12

Number of Vibration Unit: 6

Power: 3 kw.

Current: 3.84 amp.

Two different sizes of products are gained.

VCR-D 104/6

Surface Size:	1.500/4.000
Number of Screen Cloth:	2
Screening Surface Area:	6m ²
Number of Vibromotor:	12
Number of Vibration Unit:	6
Power.:	3 kw.
Current:	3.84 amp.

Two different sizes of products are gained.





VCR-D 106/10

Surface Size:	1.500/6.000
Number of Screen cloth:	3
Screening Surface Area:	$9\mathrm{m}^2$
Number of Vibromotor:	20
Number of Vibration Unit:	10
Power:	5 kw.
Current:	6.4 amp.

Two different sizes of products are gained.

MODELS OF DRY SCREENING MACHINES



VCR-D 203/12

Surface Size: 1.500/3.000

Number of Screen Cloth: 2

Screening Surface Area: 9 m²

Numbers of Vibromotor: 24

Numbers of Vibration Unit: 12

Power.: 6 kw.

Current: 7.68 amp.

Three different sizes of products are gained.

VCR-D 204/16

Surface Size:	1.500/4.000
Number of Screen Cloth:	4
Screening Surface Area:	$12 \mathrm{m}^2$
Number of Vibromotor:	32
Number of Vibration Unit:	16
Power:	8 kw.
Current:	10.24 amp.

Three different sizes of products are gained.





VCR-D 205/14

Surface Size:	1.500/5.000
Number of Screen Cloth:	4
Screening Surface Area:	$15\mathrm{m}^2$
Number of Vibromotor:	28
Number of Vibration Unit:	14
Power:	7 kw.
Current:	8.96 amp.

Three different sizes of products are gained.

MODELS OF DRY SCREENING MACHINES



VCR-D 304/22

Number of Screen Cloth:6Screening Surface Area: 18 m^2 Number of Vibromotor: 44 Number of Vibration Unit: 22 Power: 11 kw .Current: 13.76 amp .	Surface Size:	1.500/4.000
Number of Vibromotor: 44 Number of Vibration Unit: 22 Power: 11 kw.	Number of Screen Cloth:	6
Number of Vibration Unit: 22 Power: 11 kw.	Screening Surface Area:	$18\mathrm{m}^2$
Power: 11 kw.	Number of Vibromotor:	44
	Number of Vibration Unit:	22
Current: 13.76 amp.	Power:	11 kw.
	Current:	13.76 amp.

Four different sizes of products are gained.



VCR-D 303/14

Surface Size:	1.500/3.000
Number of Screen Cloth:	3
Screening Surface Area:	$13.5 \mathrm{m}^2$
Number of Vibromotor:	28
Number of Vibration Unit:	14
Power:	7 kw.
Current:	8.96 amp.

Four different sizes of products are gained.



VCR-D 306/22

Surface Size:	1.500/6.000
Number of Screen Cloth:	9
Screening Surface Area:	$27 \mathrm{m}^2$
Number of Vibromotor:	40
Number of Vibration Unit:	20
Power:	10 kw.
Current:	12.8 amp.

Four different sizes of products are gained.

MODELS OF WET SCREENING MACHINES



VCR-W103/6

Surface Size: 1.500/3.000

Number of Screen Cloth: 2

Screening Surface Area: 4.5 m²

Number of Vibromotor: 12

Number of Vibration Unit: 6

Power: 3.24 kw.

Current: 4.32 amp.

Two different sizes of products are gained.

VCR-W104/6

Surface Size:	1.500/4.000
Number of Screen Cloth:	2
Screening Surface Area:	$6 \mathrm{m}^2$
Number of Vibromotor:	12
Number of Vibration Unit:	6
Power:	3.24 kw.
Current:	4.32 amp.

Two different sizes of products are gained.



VCR-W 106/12

Surface Size:	1.500/6.000
Number of Screen Cloth:	3
Screening Surface Area:	$9 \mathrm{m}^2$
Number of Vibromotor:	24
Number of Vibration Unit:	12
Power:	6.48 kw.
Current:	8.64 amp.

Two different sizes of products are gained.

MODELS OF ZIGZAG SCREENING MACHINES

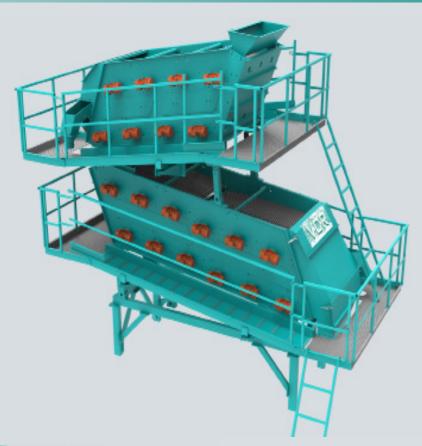
VCR-Z2 204/14

Surface Size: 1.500/3.000

1.500/4.000

Number of Screen Cloth: 12
Screening Surface Area: 21 m²
Number of Vibromotors: 28
Number of Vibration Unit: 14
Power: 14 kw.
Current: 16.8 amp.

Five different sizes of products are gained.



VCR-Z1 304/18

Surface Size: 1.500/4.000

Number of Screen Cloth: 6

Screening Surface Area: 18 m²

Number of Vibromotor: 36

Number of Vibration Unit: 18

Power: 9.72 kw.

Current: 12.96 amp.

Four different sizes of products are gained.





VCR-DeW 103/4 (DEWATERING)

Surface Size: 1.500/3.000

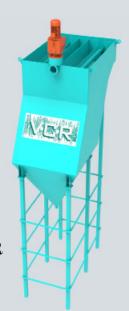
Number of Screen Cloth: 2
Screening Surface Area: 3.6 m²
Number of Vibromotor: 2
Number of Vibration Unit: 4
Power: 8.6 kw.
Current: 15.52 amp.

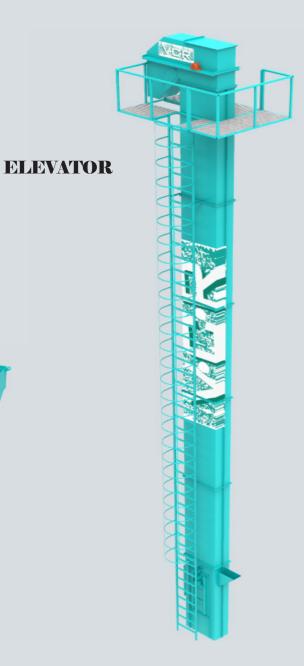
Two different sizes of products are gained.

GRILL
Screens between 50 mm - 100 mm



THICKENER





OUR REFERENCES





























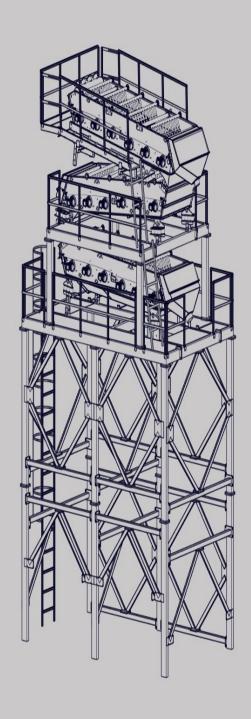












Açelya Machine

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