



Daniela Ulbrich – HAZEMAG & EPR  
**Economic solutions for the cement, aggregate & mining industry in Indonesia and worldwide**





Headquarter: Dülmen, Germany

History: 1842 / 1946

Employees: app. 200 HAZEMAG  
app. 400 Group

Annual  
turnover: 75 Mio. EUR HAZEMAG  
110 Mio. EUR Group

Shareholders: 70.5% Schmidt Kranz-Group  
29.5% Sinoma

## **Business Purpose**

Development, design, fabrication, sales and service of PROCESSING and MINING Equipment (Components up to Turn Key Plants)

# The HAZEMAG Group



**HAZEMAG**  
GROUP

**HAZEMAG**  
MINERALS

**HAZEMAG**  
ENGINEERING

**HAZEMAG**  
MINING

allmineral

IMSM  
ENGINEERING



HAUS  
HERR

Salzgitter

**TURMAG**

PERFORATOR

**HAZEMAG**  
CONTROL SYSTEMS



- 1 Alpharetta, USA
- 2 Casablanca, Maroc
- 3 Dülmen & Duisburg, Germany
- 4 Moscow, Russia
- 5 Johannesburg, South Africa

- 6 Coimbatore, India
- 7 Shanghai, China
- 8 Beijing, China
- 9 Singapore, Singapore
- 10 Malaga, Australia

**HAZEMAG**  
MINERALS

allmineral

IMSM

## Crushing & Milling

- Roll Crusher / Sizer
- Impactors
- Hammer Crusher
- Impact Roll Crusher
- Feeder Breaker
- Crushing Plants

## Feeding & Screening

- Apron Feeder
- Chain Conveyor
- Push Feeder
- Wobbler Screens

## Drying & Grinding

- Rapid Dryers
- Drying with Hammer Mills

## Drilling















- Drilling Jumbos
- Drilling Machines
- Handheld Drilling Machines

## Heading & Loading

- Road Heading Machines
- Dinting Loaders
- Side-Tipping Loaders

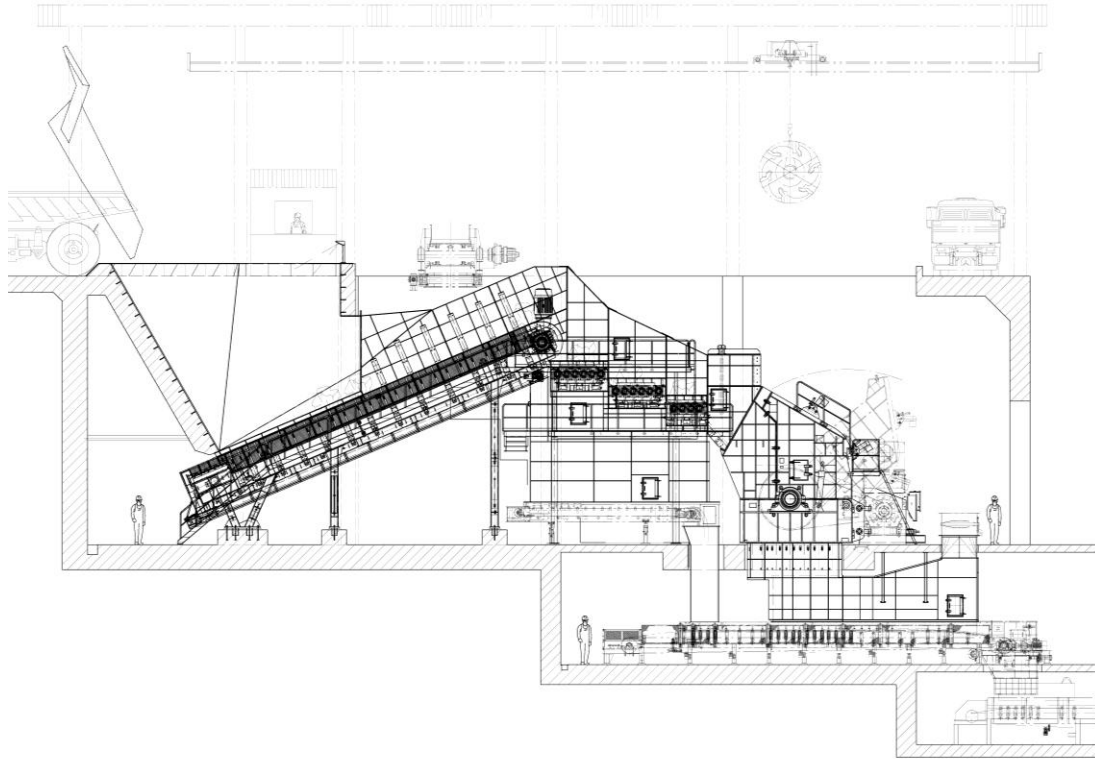


# Product Range – Selection Criteria for Crusher

Design	Type	Design	Max. Capacity [t/h]	Max. Feed Dimension [mm]	Max. Compr. Strength [Mpa]	Max. Crushing Ratio		Product [mm]	Typical Feed Material	Max. Silica Content [%]	Max. Moisture [%]	
						from	to					
Impact Crusher	primary	HPI		2500	2800	200	1:8	1 : 25	0 -120 (70)	limestone demolition rubble	10	8
	secondary	HSI		800	300 (500)	200	1:8	1:12	0 - 45	limestone gravel basalt	8	5(8)
	tertiary	HTI		150	70 (150)	200	1:5	1:10	0 -4 (12)	limestone gravel basalt	4	2
Compound Impact Crusher	primary	AP CM		2000	2800	200	1:20	1 : 50	0 - 50	limestone	10	8
Double Shaft Hammer Crusher	primary	HDS		2500	1800	120	1:10	1 : 80	0 - 30 (50)	limestone	10	16
Hammer Mill with variable grinding path	secondary	HUV		800	250	120	1:10	1:15	0 - 40	limestone	8	6 (12)
Hammer Mill	tertiary	HNM HUM		250	70 (100)	120	1:8	1:12	0 - 5 (2)	limestone	6	2 (8)
Impact Roll Crusher	primary	HHC		2000	2400 x 8000 x 1400	200	1:5	1 : 10	0 - 200 (150)	coal, limestone demolition rubble	10	20
Double Roll Crusher	primary	HRC		4000	1800	150	1:3	1 : 5	0 - 350	limestone, coal	10	20
Double Roll Crusher	secondary	HRC		1200	350	140	1:3	1 : 5	0 - 150	limestone, coal	10	20
Center Sizer	primary	HCC		4000	1800	150	1 : 3	1 : 6	0 - 350	limestone	8	20
Center Sizer	secondary	HCC		1200	300	150	1 : 4	1 : 7	0 - 150	limestone, clay	8	20
Side Sizer	secondary	HSS		1500	300	110	1 : 4	1 : 7	0 - 120	coal	8	20
Feeder Breaker	primary	HFB		1000	1700	105	1 : 5	1 : 10	0 - 120 (80)	coal clay	10	30

All values are approximate and refer to the processing of limestone. They may differ with different material properties and processing tasks.

# Cement & Aggregates – Application in Indonesia



**Crushing of 2,500 tph limestone and clay from 1,200 mm to 80 mm for cement production**

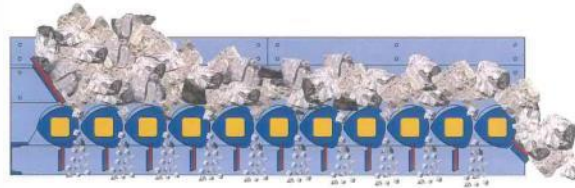
Client: Bayah Cement Plant  
Sold via: Sinoma, Nanjing  
Location: Bayah  
Commissioning: scheduled for 2015  
HAZ Products: Apron Feeder HAF  
Roller Screen HRS  
Impact Crusher HPI

## Feeding: Apron Feeder HAF



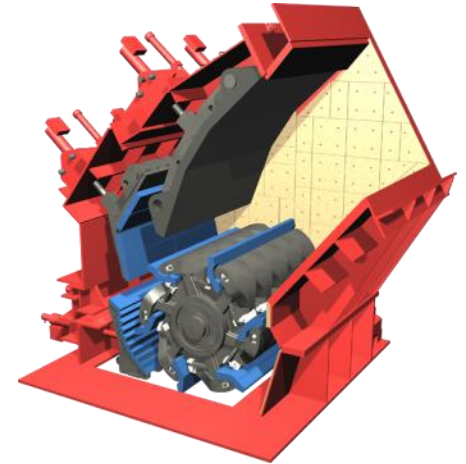
Capacity	up to 10,000 tph
Length	max. 25 m
Width	max. 3 m

## Screening: Roller Screen HRS

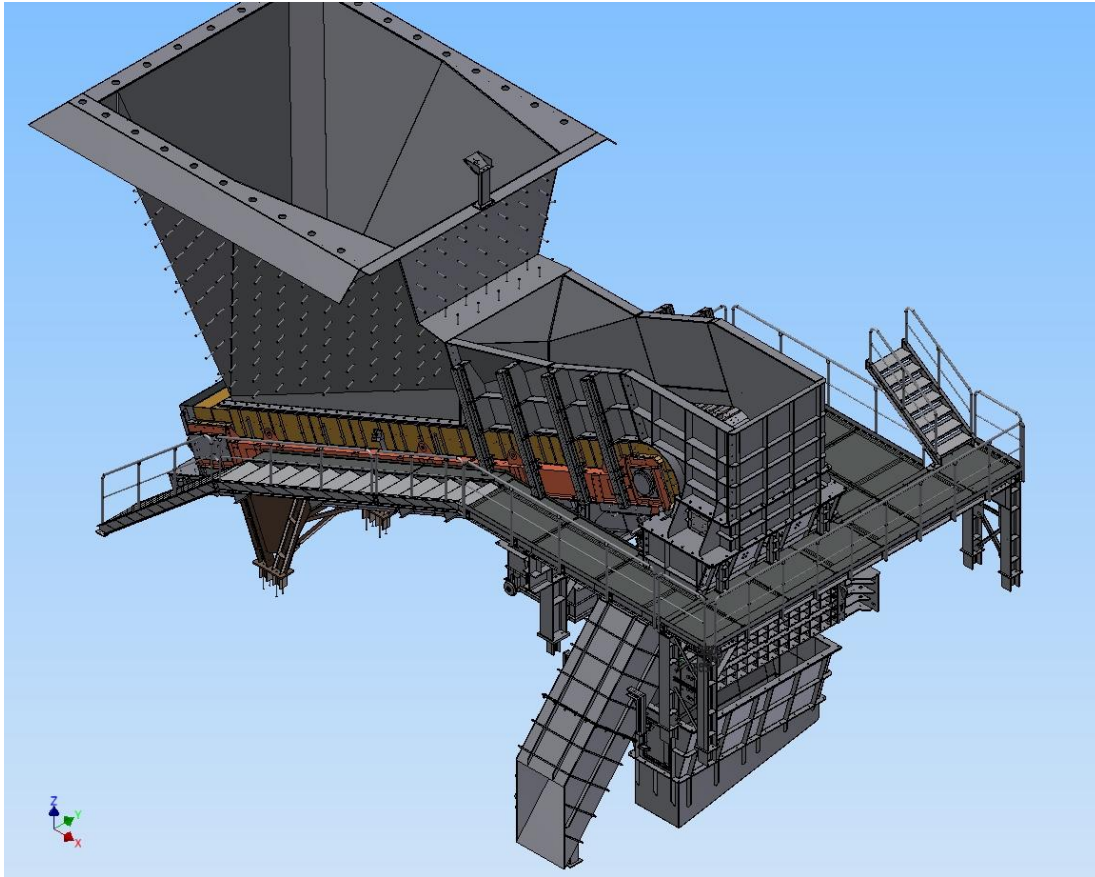


Capacity	up to 2,500 tph
Feed size	up to 2,000 mm
Separation	20 – 120 mm

## Crushing: Impact Crusher HPI



Capacity	up to 2,500 tph
Feed size	up to 2,000 mm
Final product	0 – 80 mm



**Two identical plants for clay crushing at 400 tph from 400 mm to 50 mm product as raw material for cement production**

Locations: Rembang, Java  
Indarung Padang, Sumatra

Commissioning: scheduled for 2015

HAZ Scope: Apron Feeder HAF  
Center Sizer HCS  
Belt Conveyor  
Basic Engineering

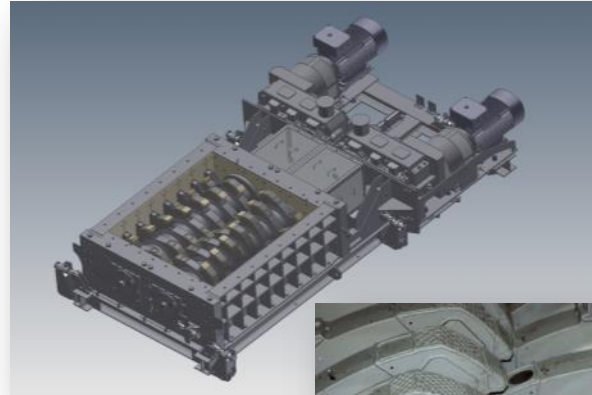


## Feeding: Apron Feeder HAF



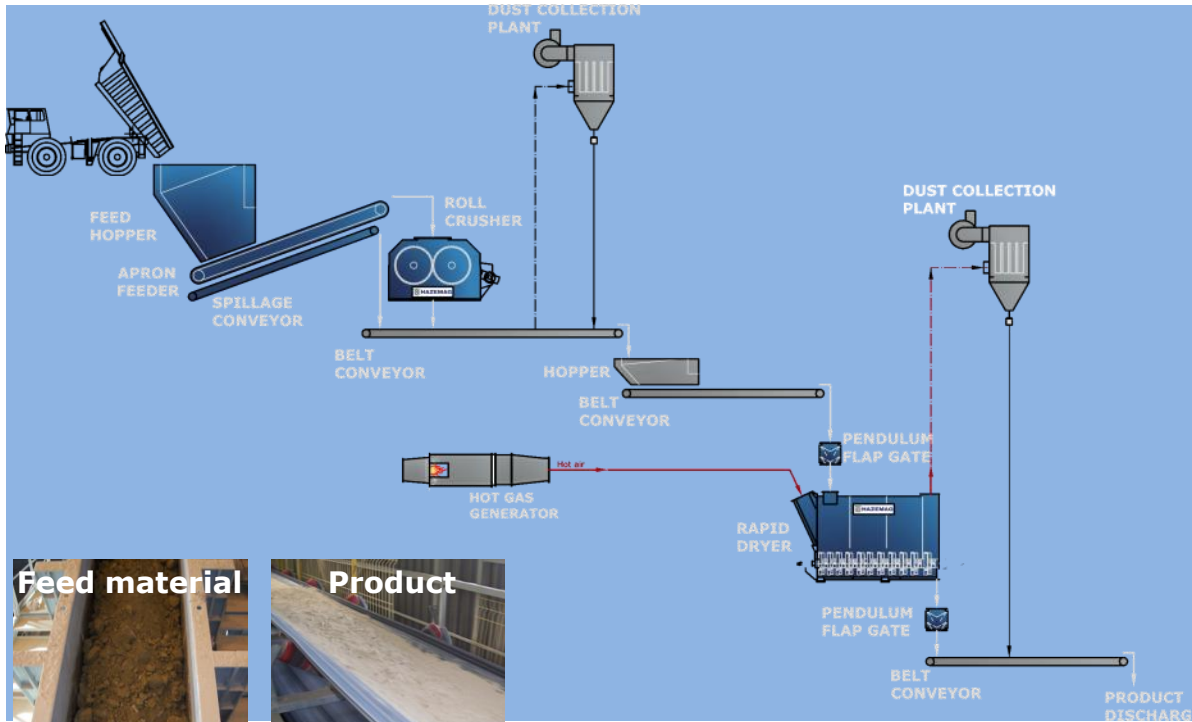
Capacity	up to 10,000 tph
Length	max. 25 m
Width	max. 3 m

## Crushing: Sizer HCS



Capacity	up to 4,000 tph
Feed size	up to 1,500 mm
Final product	0 – 40 mm

# Cement & Aggregates – Application in Drying



Feed material

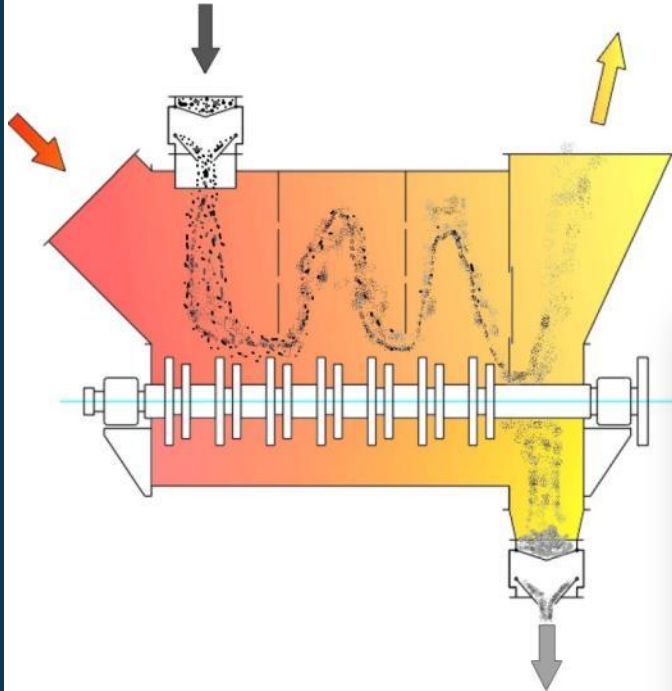


Product



**Crushing and drying of clay from 25% moisture to <5% as raw material for cement production**

Locations: Mordow, Russia  
Commissioned: 2011  
Capacity: 30 tph/90 tph (2 lines)  
Feed material: 0-300 mm, moisture 25%  
Product: 0-60 mm, moisture 5%  
HAZ Scope: Apron Feeder HAF  
Roll Crusher HRC  
Rapid Dryer ASS  
Basic Engineering



## Drying: Rapid Dryer

Type of dryer: Short-retention dryer

Materials: Granular, pasty, slimy materials

Examples: clay, fly ash, filter cake, slurry, petcoke, chalk, blast furnace slag,

Capacity: up to 150 tph

Hot gas temp: up to 800°C

# Coal Mining – Application in Indonesia



**Conveying of 2,500 tph crushed coal from floating terminal to ocean liner for export**

Client: ASL Energy  
Location: Kalimantan  
Commissioned: 2005  
HAZ Products: 3x Reclaim Feeder

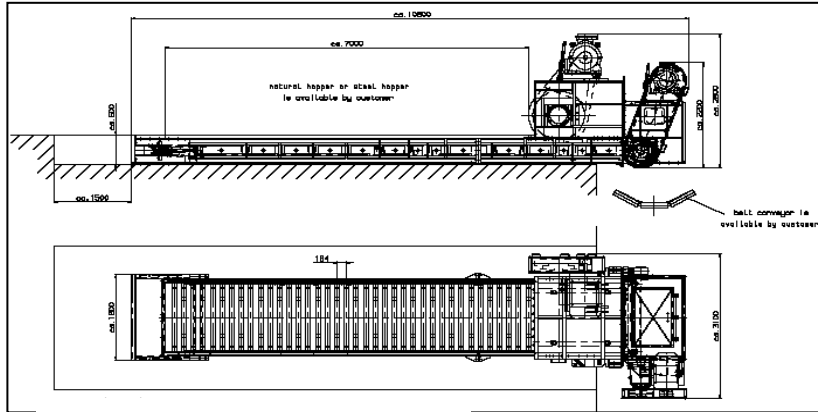




## **Crushing of 1,000 tph coal from 600 mm to 65 mm**

Client: PT. Indonesia  
Pratama  
Location: Buluksen, Tabang  
Commissioned: 2014  
HAZ Products: Roller Screen HRS  
Feeder Breaker HFB

## Conveying & Crushing: Chain Conveyor HCC / Feeder Breaker HFB



Capacity	up to 4,000 tph
Feed size	up to 1,500 mm
Final product	50 – 150 mm
Features	stationary or semi mobile with or without foundation with or without feed hopper



# THANK YOU

For your attention

