



DLGPX

DOUBLE-TOOTH ROLLER CRUSHER

High-capacity secondary crushing for limestone and mining applications

450-1000

t/h processing capacity

≤400 mm

maximum feed size

≤80 mm

discharge particle size

65-80%

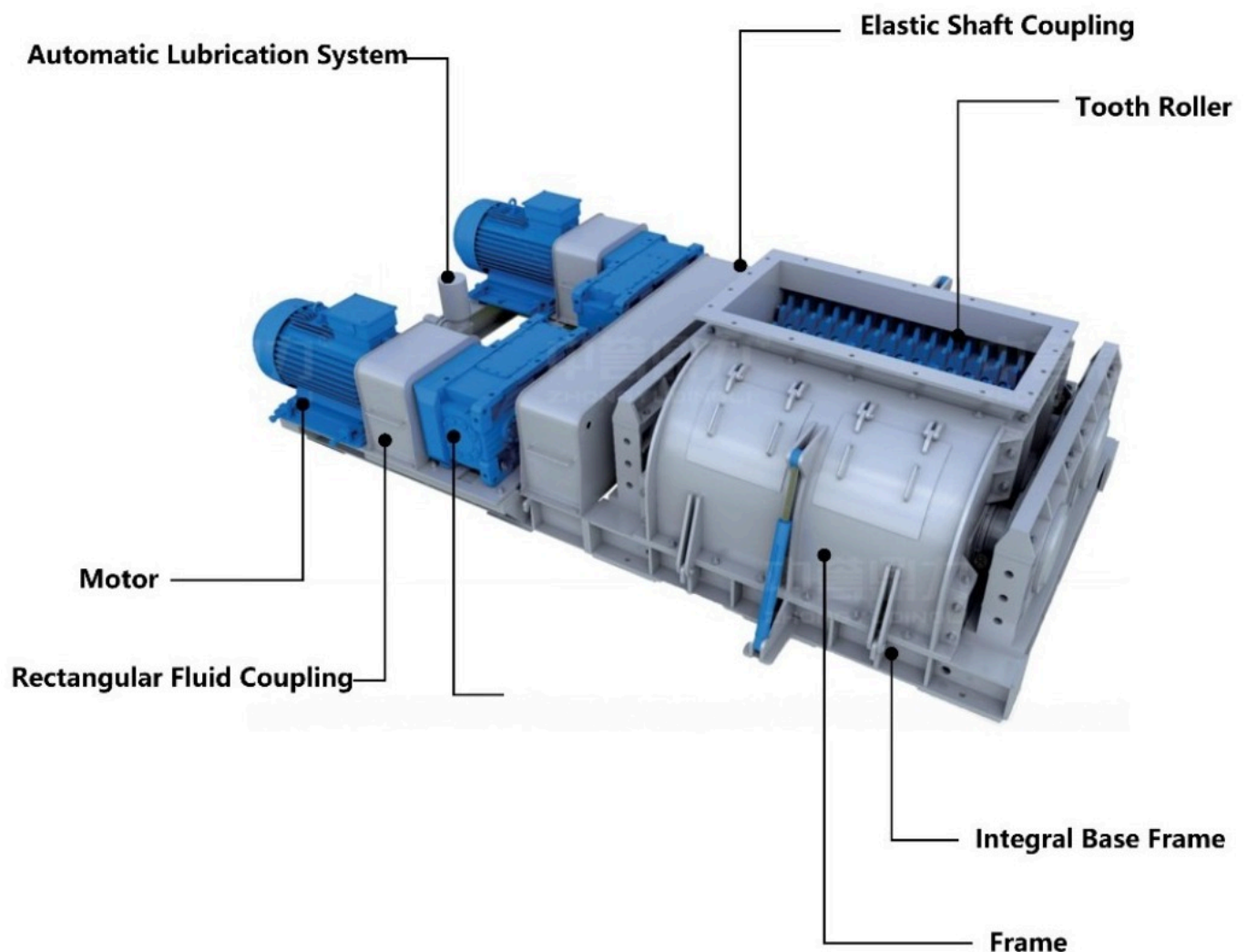
finished product rate

PRODUCT OVERVIEW

MAIN COMPONENTS

Developed for the limestone sand and limestone powder industry, the DLGPX double-tooth roller crusher produces a finished product with a high pelletising rate and a uniform, consistent particle shape — improving the economic return on finished limestone products.

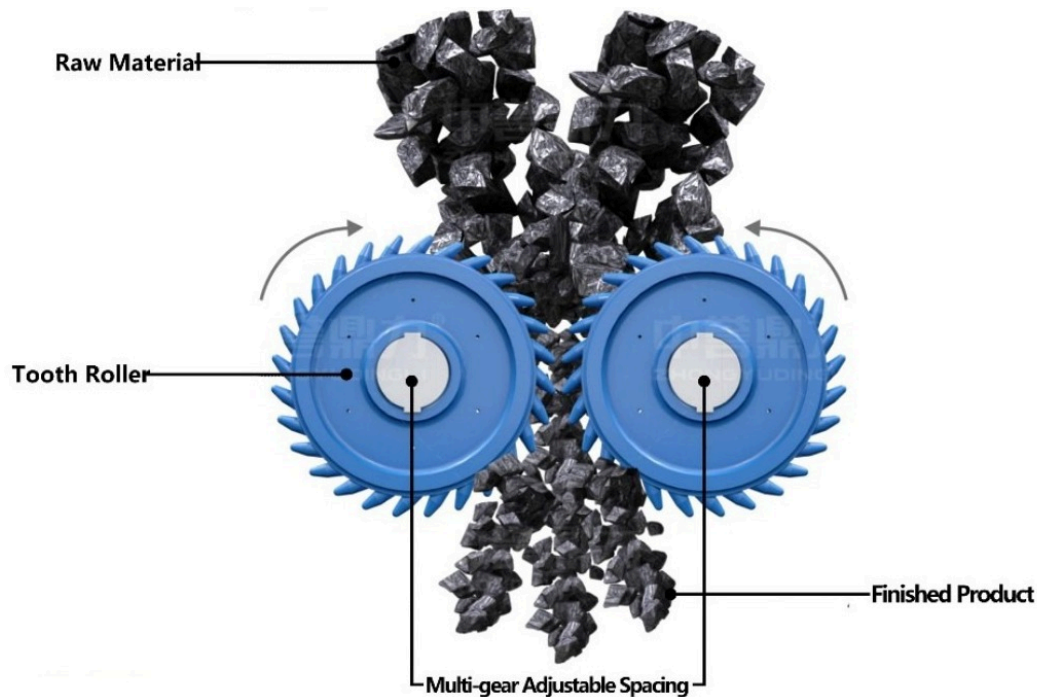
The DLGPX crushes material through a combination of shearing, extrusion and stretching. Its biggest advantages are a **higher finished product rate, low over-crushing, a regular discharge shape, hardened roller-surface tooth plates, longer wear life, and simpler, more convenient maintenance.**



WORKING PRINCIPLE

AND TECHNICAL PARAMETERS

Material enters the gap between the two tooth rollers, where the rollers turning towards each other subject it to extrusion and shearing forces. Under extrusion, shearing and grinding, the material is crushed to the required particle size.



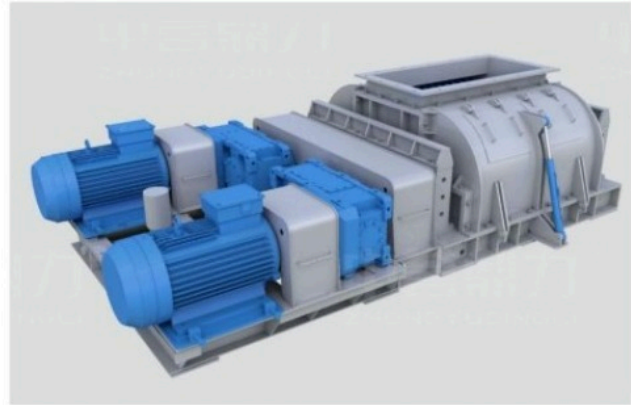
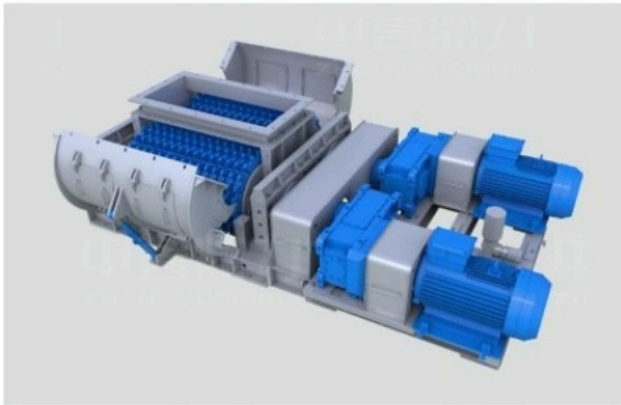
TECHNICAL PARAMETERS

Item	Parameter	DLGPX1218	DLGPX1230	Unit
1	Roller size	1200 × 1800	1200 × 3000	mm
2	Main shaft speed	60	60	r/min
3	Feed opening size	800 × 1800	800 × 3000	mm
4	Maximum feed particle size	≤ 350	≤ 400	mm
5	Discharge particle size	≤ 80	≤ 80	mm
6	Processing capacity	450 – 550	800 – 1000	t/h
7	Motor power	160 × 2	220 × 2	kW
8	Overall dimensions	5700 × 2380 × 1600	6900 × 3280 × 1600	mm

Technical parameters may change as the design is improved; final data is based on the supplied machine. Output of the same model can vary with the process configuration, product requirements and raw material on each project — the specific output is based on the process design.

PERFORMANCE FEATURES

BUILT FOR WEAR, UPTIME AND EASY MAINTENANCE



1 The frame is an assembled structure, making maintenance and replacement of wear parts easier.

3 Roller teeth are high wear-resistant, water-toughened steel; the tooth surface can be hardfaced, and single tooth seats can be repaired locally — extending tooth disc life. High hardness, good toughness and strong impact resistance.

5 The main shaft is forged 42Cr steel and the tooth plates are ultra-high manganese alloy — sturdy and durable.

7 The torque-limiting hydraulic coupling at the motor end gives a smoother start, overload protection and resistance to wear and impact.

9 A large-capacity automatic lubrication system extends operating time and reduces manual greasing and maintenance.

2 The crushing teeth are multi-piece inserts fixed to the roller body like scales — easy to replace on site, and single tooth plates can be swapped individually.

4 Conventional tooth roller crushers adjust spacing by moving the centre, with only 2 steps and a 20–30 mm range. The DLGPX uses sliding bearing seats for multi-step centre-distance adjustment, giving a stable, qualified discharge size.

6 Triple protection (hydraulic coupling, electrical protection, nylon sprocket) greatly reduces failures caused by overload or foreign objects.

8 Stacked labyrinth seals keep the bearing chamber clean regardless of the working environment, extending bearing life.

10 Dedicated observation windows and access doors with a hydraulic box-opening device allow inspection and maintenance whenever the machine is stopped.

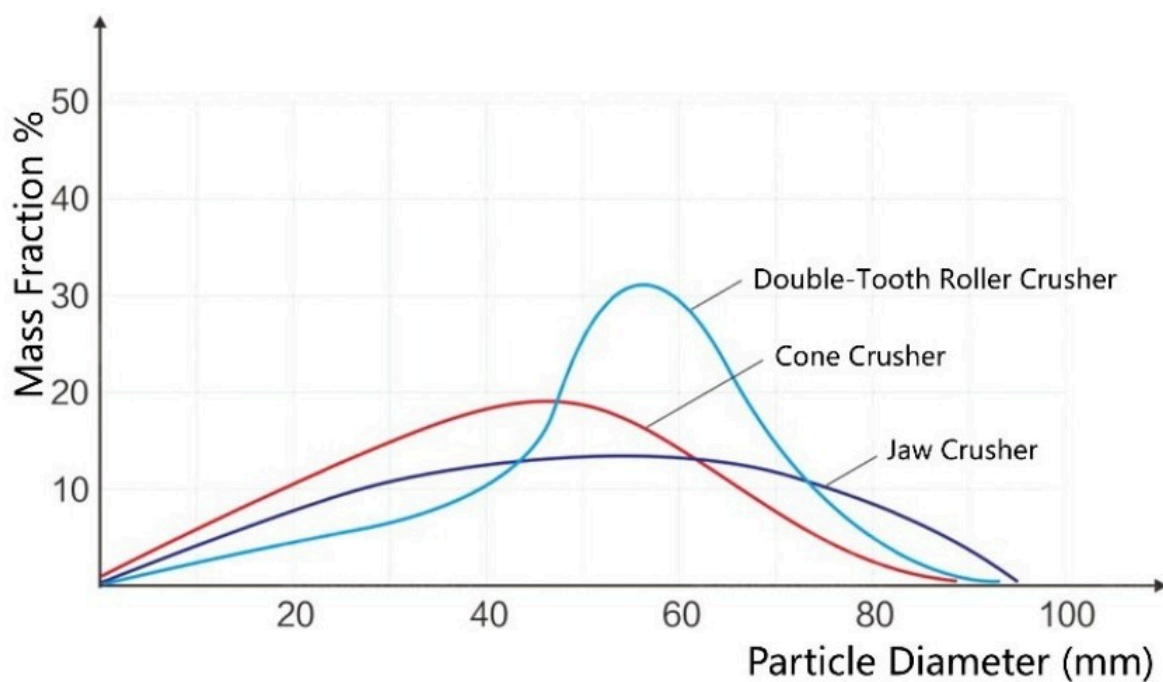
ADVANTAGE COMPARISON

AGAINST OTHER SECONDARY CRUSHERS

Testing and field use show that, compared with other secondary crushing equipment, the double-tooth roller crusher has significant cost advantages.

Comparison	Double-Tooth Roller Crusher	Hammer / Impact Crusher	Jaw / Cone Crusher
Crushing principle	Shearing, extrusion, stretching	Impact	Extrusion
Finished product rate	65% – 80%	30% – 40%	40% – 55%
Finished product shape	Uniform particle size, close to a regular polyhedron	Good particle shape, close to a regular polyhedron (rounded)	Contains strip-shaped and flaky material
Particle size adjustment	Adjustable, reliable positioning, easy operation	Adjustable, relatively complex operation	
Maintenance cost	Low workload and cost; a crushing tooth plate can handle up to 3 million tons of material in its service life	Relatively high maintenance and repair cost	
Resource utilisation	Increased by 15% – 30%	Relatively low utilisation; severe over-crushing is likely	

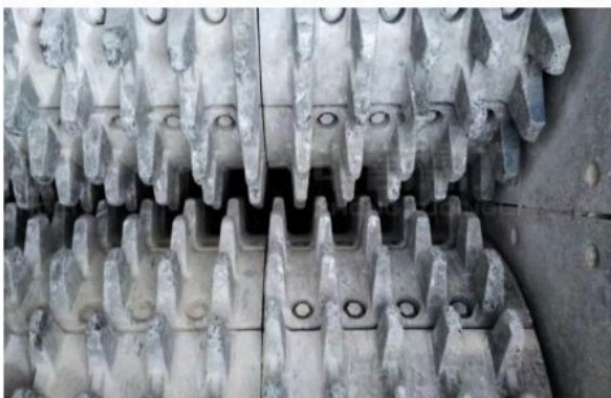
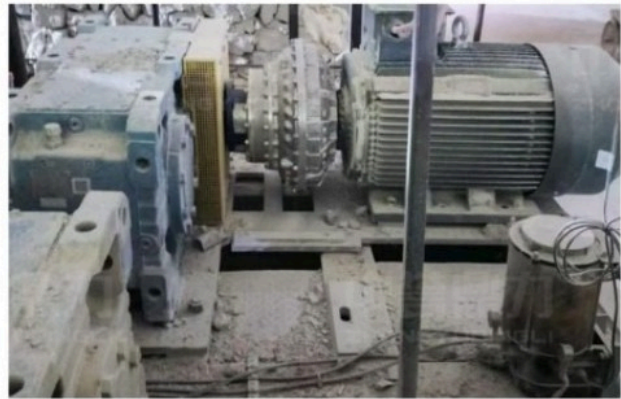
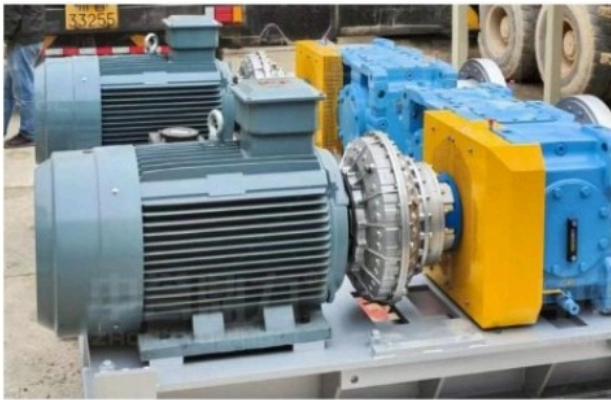
PARTICLE SIZE COMPOSITION CURVE



Particle Size Composition Curve

APPLICATION CASES

DLGPX CRUSHERS IN THE FIELD



For quotations, project sizing, availability and technical confirmation, contact Hydraulic Squad.

CATALOGUE HIGHLIGHTS

- Models: DLGPX1218 and DLGPX1230.
- Crushing action: shearing, extrusion and stretching between two tooth rollers.
- Maximum feed size: ≤ 350 mm (DLGPX1218) and ≤ 400 mm (DLGPX1230).
- Discharge particle size: ≤ 80 mm, subject to project configuration.
- Processing capacity: 450–550 t/h (DLGPX1218) and 800–1000 t/h (DLGPX1230).
- Features include automatic lubrication, multi-step adjustable roller spacing and replaceable tooth plates.

Technical values are based on supplier brochure material and should be verified against the final project process design.



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