



DONGHUA SOLUTION RANGE

PREMIUM CHAINS FOR **FOOD &
BEVERAGE APPLICATIONS**



Premium quality for production facilities
and logistic environments



DONGHUA'S PREMIUM QUALITY FOR DEMANDING APPLICATIONS

As one of the largest manufacturers of roller chains in the world, Donghua keeps on innovating for its strategic customer. We are proud to present our latest solution range especially for the food and beverage industry.

This solution range consists of 8 different chain types



INDUSTRIES AND APPLICATIONS

Our F&B solution range is used in production and logistic industries such as:

- **slaughter houses**
- **meat processing**
- **drinks**
- **diary**
- **confections**
- **vegetables**
- **fruit**
- **bakery**
- **ice cream**

Applications for this solution range are amongst others:

- **drive**
- **shaping**
- **filling**
- **processing**
- **sterilisation**
- **baking**
- **cooling**
- **sorting**
- **packaging**
- **conveying**
- **storing**

DONGHUA COMPETENCE CENTER

Our competence center translates the future needs of buyers from key target markets like the food and beverage industry, into innovative products. Donghua chains are produced in China and customization is done in Europe. It's the combination of European/Chinese innovation and production strength of our parent company that makes these developments possible. The Donghua food and beverage solution range consists of a series of chains that perfectly meets the market requirements in terms of quality, corrosion resistance, precision and wear resistance.



OUR WORKSHOPS OFFER YOU:

- Engineering capacity (production drawings, 3D drawings and constructions)
- Transmission drive calculations (bearing area-, fatigue-, breaking load-, and life time calculations)
- Assembly and sub-assembly
- Mounting of attachments, extended pins, paddles, slats and customer specific components
- Fit to shaft bores for sprockets according to customer specifications
- Special lubricants or re-lubrication according to customer specifications
- Putting together Kits for KA N-Ban planning and production
- Production of official certificates and technical reports including matched length measurements and tolerances

Chains from Donghua are ISO9001-2000 and API certified

**Our chains are fully compliant with
ISO 606-DIN:8187 & ISO 606-DIN:8188**



DONGHUA is one of the largest manufacturers of chains and chain systems in the world. Over 3,000 employees in Hangzhou fabricate more than 150,000 tonnes of chains and chain systems per year. To guarantee a perfect quality, all chains are given a unique traceable production code. In addition, all chains are certified under ISO9001-2000 and API. By choosing Donghua, you are opting for availability, expertise in design and market-oriented product development.



Donghua's main sites manufacture products such as transmission chains, conveyor chains, agricultural chains, lifting chains, oil field chains, escalator chains, automotive chains and many special chains.

DELIVERY FROM STOCK

Apart from being worldwide distribution centre, our competence centre in the Netherlands is the primary site for R&D, engineering and customer-specific solutions. Here important bridges are build between the needs of European OEMs and MRO partners, and our high-quality production in China. The food and beverage solution range was created based on the demand and requirements of our customers for corrosion resistant, low maintenance and high-performance transmission roller chains.

THE FOOD AND BEVERAGE SOLUTION RANGE CONSISTS OF 8 CHAIN TYPES:

Solution chains for corrosive environments	corrosive environments	tensile strength	producibile with attachments
NP Nickel plated steel roller chain	**	***	****
ZT - Zin-Tec steel roller chain with zinc aluminium coating	***	****	*
ZT+ - Zin-Tec steel roller chain ZT coated, with chemically plated pins	***	****	*
SS+ (SS304) roller chain with hard chromized pins	***	**	***
SS 304 Stainless Steel roller chain	****	**	***
SS DT (SS304) roller chain with DRY-TEC engineered plastic slide bearings	****	**	***
PC - Poly Steel Chain SS 304 outer links, engineer plastic inner links.	****	*	***
SS 316 Stainless Steel roller chain	*****	**	*

Solution chains for maintenance free applications	corrosive environments	tensile strength	producibile with attachments
SLR Self lubricated Nickel plated steel roller chain	**	****	**
SS DT - SS304 DRY-TEC roller chain	****	****	***
PC Poly Steel Chain	****	****	***
O-ring roller chain	*	*****	*

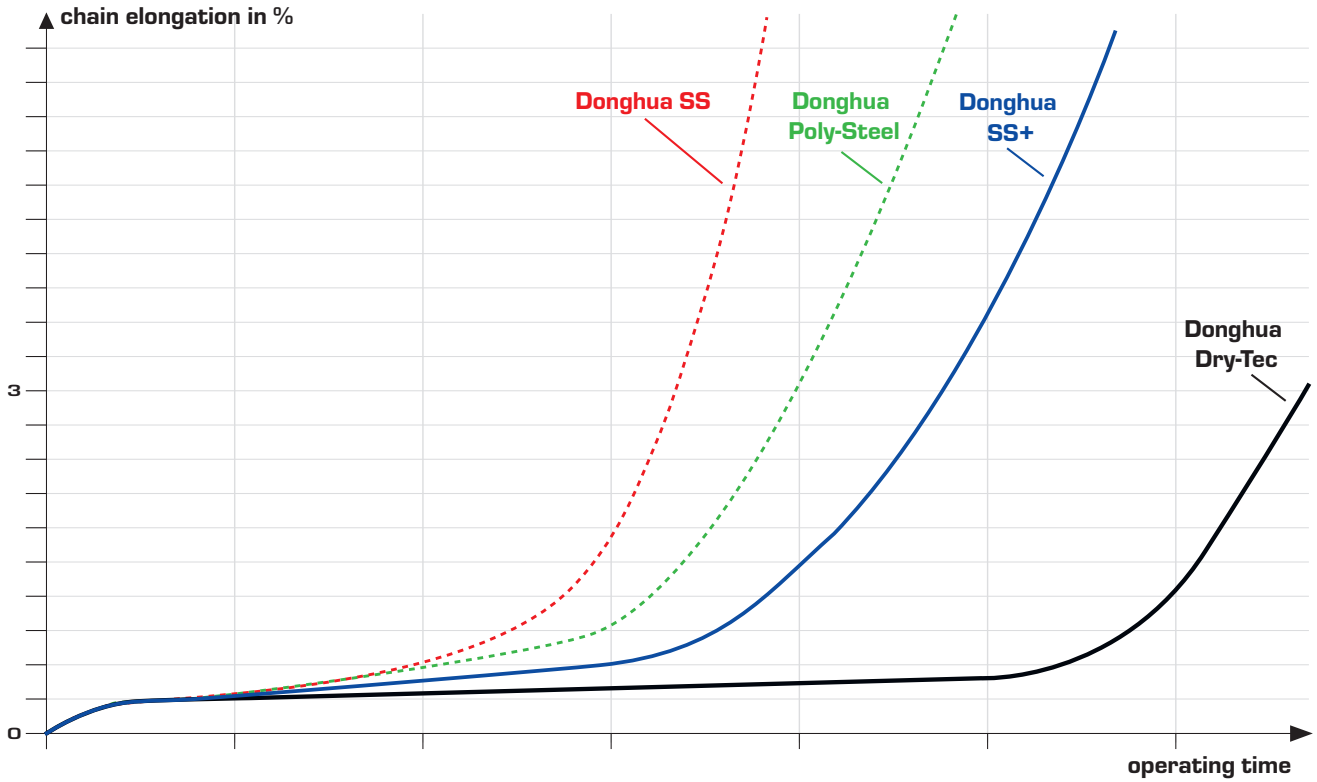
Our recommendations Best ***** Very Good **** Good *** Better ** Standard *

On request every chain can be assembled with attachments or extended pins.



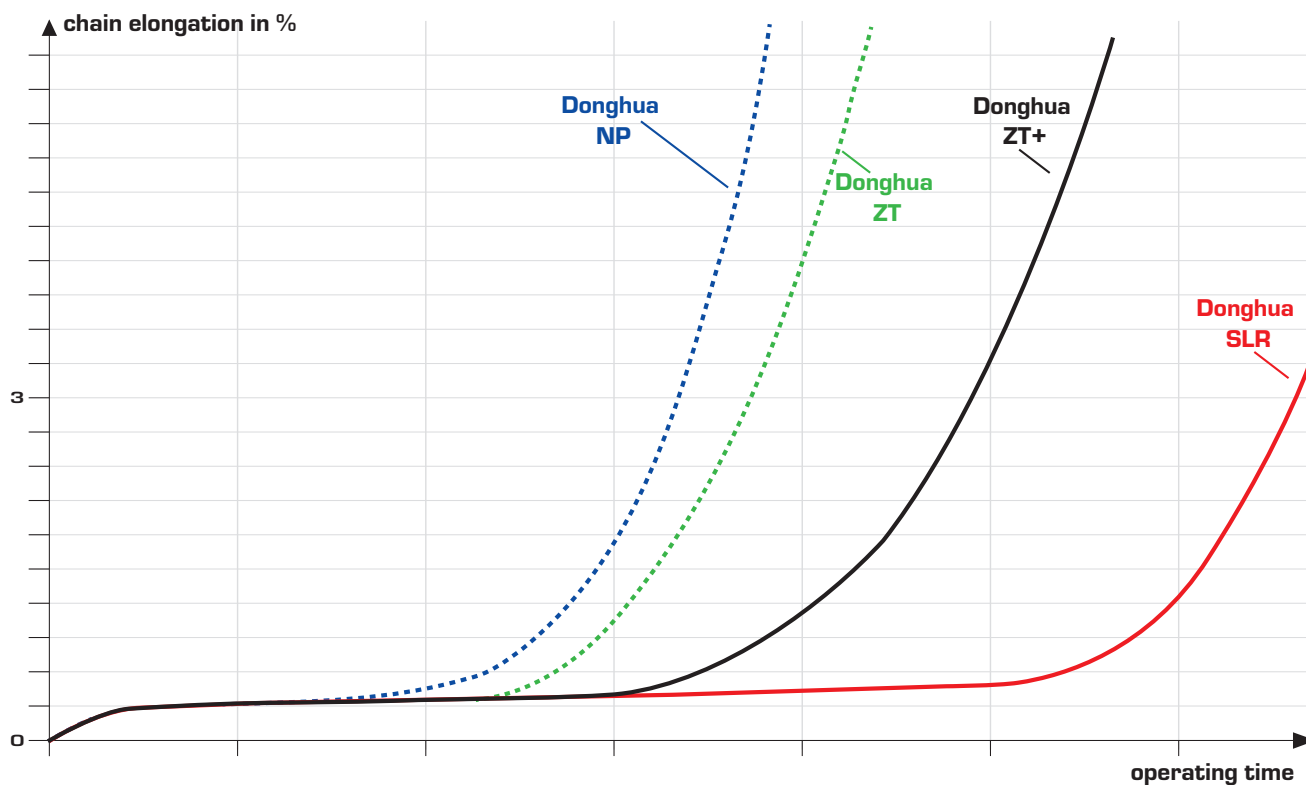
OVERVIEW SOLUTION RANGE

QUALITY POSITIONING



	Donghua SS	Donghua SS+	Donghua Dry-Tec	Donghua Poly-Steel
Wear Resistance	*	***	****	**
Fatigue Resistance	**	**	**	*
Strength (MUTS)	**	**	**	*
Shock Load	**	**	**	*
Corrosion Resistance	****	*****	****	****
Self-Lubricating	**	***	*****	****
High Abrasion Resistance	***	***	***	****
FDA Approved (Food)	****	****	***	****
Damp/Wet Environment	****	****	****	****
High Temperature	****	***	**	*

Our recommendations Best ***** Very Good **** Good *** Better ** Standard *



	Donghua NP	Donghua ZT	Donghua ZT+	Donghua SLR
Wear Resistance	***	**	****	*****
Fatigue Resistance	**	**	**	**
Strength (MUTS)	****	****	****	**
Shock Load	***	***	***	**
Corrosion Resistance	***	****	****	***
Self-Lubricating	*	*	**	*****
High Abrasion Resistance	***	****	****	***
FDA Approved (Food)	-	-	-	-
Damp/Wet Environment	*	****	****	**
High Temperature	**	*	*	*

Our recommendations Best ***** Very Good **** Good *** Better ** Standard *

TECHNICAL SPECIFICATIONS

Donghua's solution series of premium chains are manufactured based on new production techniques and new surface treatments. Therefore these series add value in direct and indirect food and beverage production and logistic environments where sterility and hygiene are key to ensure food safety. Donghua solution chains add value in wet or cold (corrosive) environments due to outstanding corrosion resistance.

Donghua drive chains meet the high requirements of the food industry, offering different food-grade lubricants for special food applications. Manufactured to DIN8187 and DIN8188, this chain is pre-loaded, has seamless rollers and comes marked with a production batch code number for complete traceability. All Donghua chains are sealed in plastic bags and packed in cardboard boxes with clear descriptions and safety instructions.



DONGHUA PC

POLY STEEL CHAIN

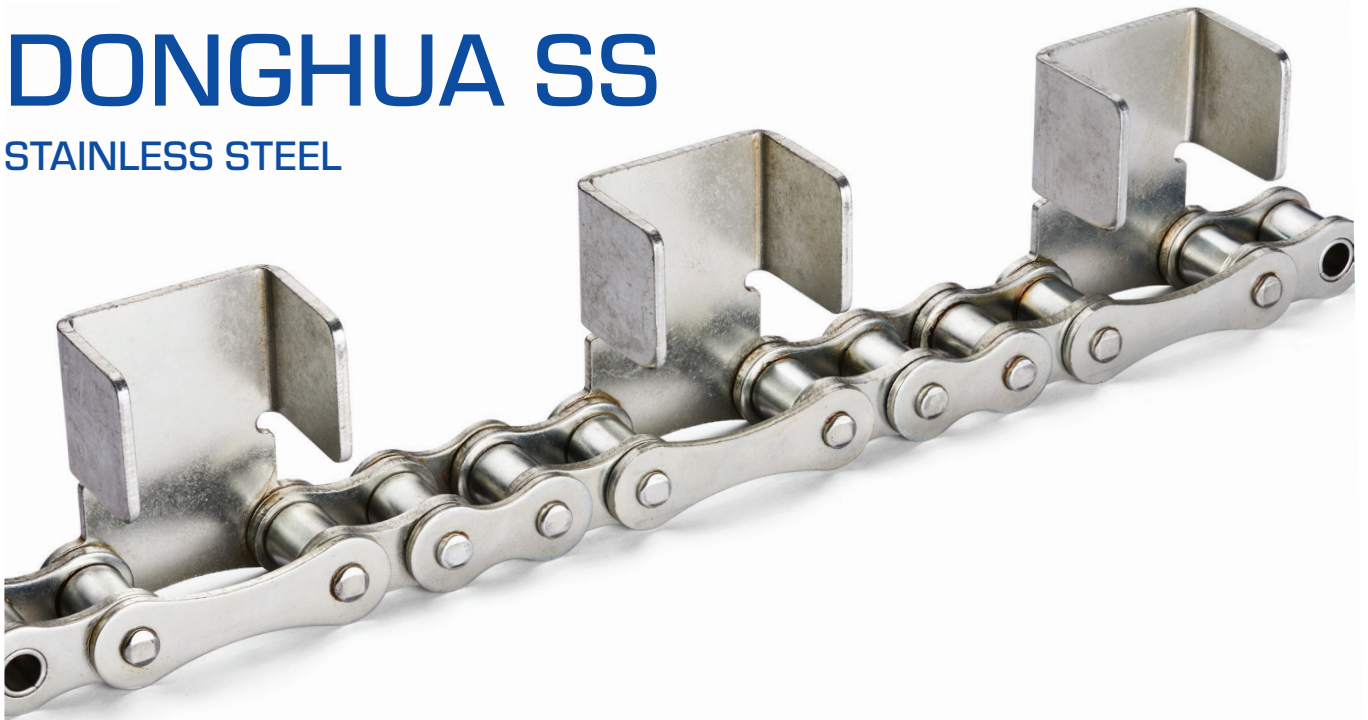


PC (POLYSTEEL CHAIN)

The Donghua PC-chain is assembled with outer links made of stainless steel 304 and inner links made of injection molded plastic. (white or blue). Due to the low friction characteristics of the inner links it is possible to operate this chain without lubrication. The chain is very corrosive resistant, 50 % lighter than a normal standard roller chain and produces less noise. Often used where hygiene is important.

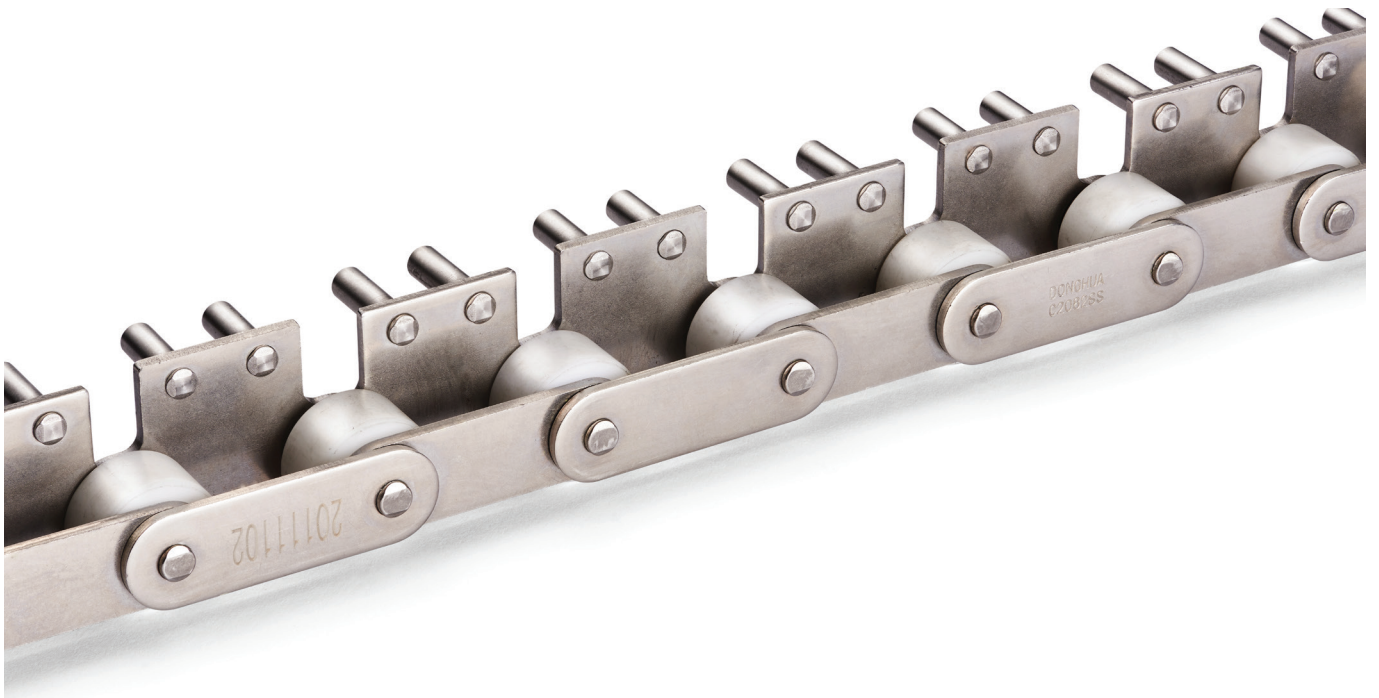
DONGHUA SS

STAINLESS STEEL



SS304 (MATERIAL NR. 1.4301)

The SS304 has a competitive quality price ratio and is often used in food and beverage corrosive environments. Very good corrosion resistance against moist and chemicals.



SS316 (MATERIAL NR. 1.4401)

The SS316 has an even higher corrosion resistance, especially sea water and heavy chemicals and is therefore used in more demanding corrosive environments.

DONGHUA SS

STAINLESS STEEL



SS+

Donghua SS+ drive chains offer a +30% higher wear resistance than normal Stainless Steel drive chains due to the use of hard chromized pins (SS420).



SS DT (DRY-TEC)

Donghua SS DT offers a maintenance free operation through the use of engineered plastic slide bearings between pin and bush for self-lubricating effect. Depending on the environmental circumstances, wear life improvement of 50 % is possible compared to the standard stainless steel roller chain. All metal parts are in SS304.

DONGHUA NP/ZP

NICKEL AND ZINC PLATED



NP (NICKEL PLATED) & ZP (ZINC PLATED)

Donghua nickel plated & zinc roller chains are developed to offer a better corrosion resistance in moist conditions. On request this is also available as a chemical nickel plated version. However, the anticorrosion protection of zinc and nickel is limited.

DONGHUA ZT/ZT+

(ZINTEK)



ZT (ZINTEK)

Donghua ZT coated roller chains are coated with a zinc aluminum compound. This coat has proven to have extremely high corrosion resistance in many different challenging environments. Suitable for many different applications in most demanding environments where a standard zinc plated coating or nickel coat is not an option. Zintek is free from harmful metals, but cannot be in direct contact with food.



ZT+

The Donghua ZT+ has the same properties as the ZT but offers an even higher wear resistance due to the use of chemical nickel plated pins with a surface hardness of 900HV. These pins also have an excellent corrosive resistance.

DONGHUA SLR

SELF LUBRICATION ROLLER CHAIN



SLR (SELF LUBRICATION ROLLER)

Donghua SLR roller chain are produced with chemical nickel plated pins and sinter steel bushes impregnated with a special sinter oil which provides the necessary lubrication when the chain is in progress. All other parts are nickel plated for a light anti corrosion resistance. This chain is used in applications where maintenance is not possible or very difficult. Re-lubrication is not needed nor recommended.

DONGHUA O-RING / X-RING



O-RING

O-ring series offer better wear resistance, better fatigue resistance and higher precision than our standard roller chains. This is realized by an O-ring or X-ring design between inner and outer plates, solid bushes and solid rollers combined with a long lasting lubrication. The O-rings keep the dust and pollution outside the pin/ bush area while keeping the lubrication inside. Often used in a dirty or high speed application.

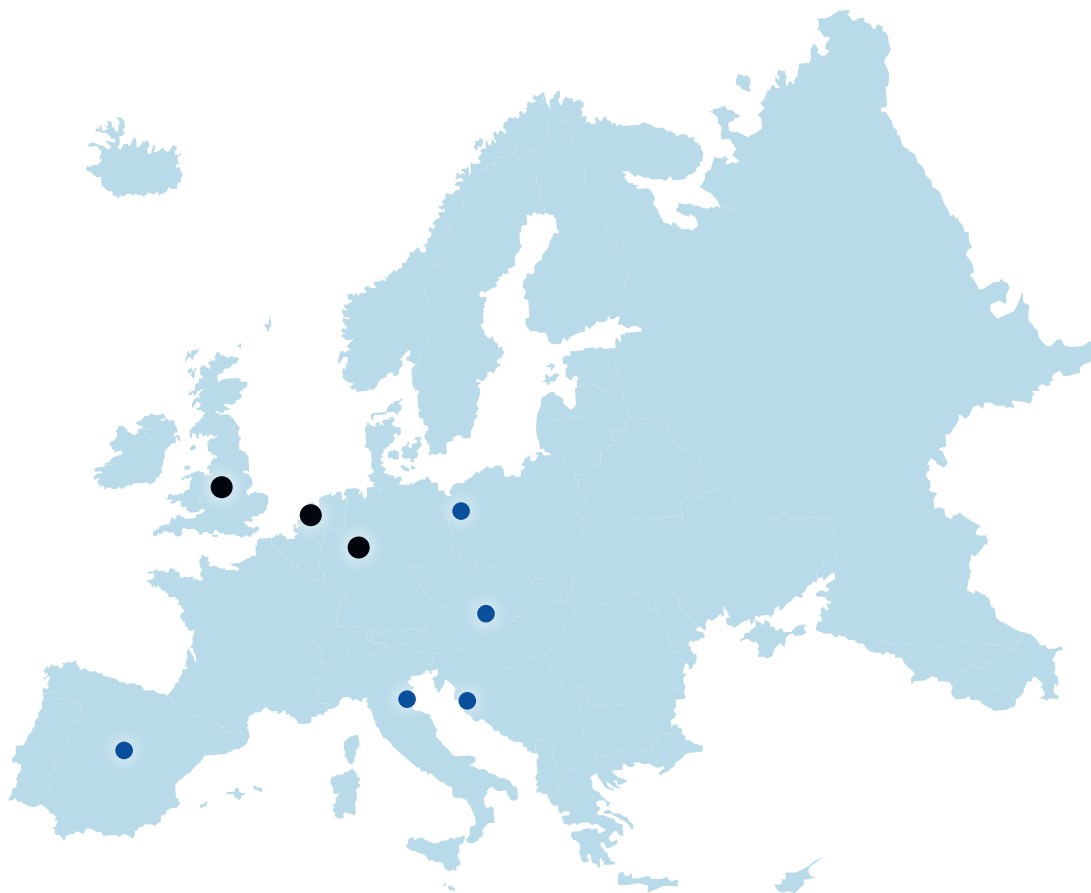


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