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Passion for Food Cutting

At TREIF, everything revolves around food cutting. We are passionately devoted to this exciting task and want to offer our customers not only the best possible cutting solutions, but also to improve their products' chances on the market.

With our innovative machines, production lines and systems in food cutting and slicing technology, we can make a significant contribution to our customers' success. What enables us to achieve this is our unique range of cutting capabilities and the close

working relationship we always maintain with our customers. Whether for meat, sausage or cheese, bread and confectionery, or for cutting dices, strips or slices, TREIF knows the most suitable cutting technique and exactly how to apply it. The great number of national and international TREIF patents are evidence enough of our innovative power.

We put body and soul into ensuring our customers get the greatest possible benefits: qualified engineers, motivated sales







specialists and experienced service technicians - often master butchers or bakers - work to secure the topclass performance required for providing maximum benefit. And we will never stop looking for the better solution so that our customers will remain successful in their markets.

Our goal is customer satisfaction. We hope to achieve this through our unique combination of cutting technology and customer service. What began over 70 years ago with the manufacture and sale of bone saws and grindstones has developed into what is now TREIF - a leading international business in the field of food cutting technology.

An enterprise with substance and passion. Built on our corporate strength and directed consequently towards our customers and their markets.







With 500 employees worldwide, we accompany our customers in their quest for solutions to their cutting challenges. For this purpose, we maintain four independently operating, highly specialised Competence Units, which combine the world's greatest range of food cutting technology under one roof.

To assist our customers, there are selected specialists in each Competence Unit, who deal exclusively with the solution of problems and fulfilment of requirements specific to their application field. As a 4-fold specialist, we can offer our customers trans-sectoral competence. And are able to secure them the advantage they need in their markets.

TREIF - because there's more to cutting than just cutting!







Dicing with TREIF - the benefits at a glance:

The success story which is TREIF began with dicing and grating foodstuffs. On this basis, the specialists for the Competence Unit DICING set clear priorities in developing and producing machines:

powerful, first-class cutting quality, user friendly, easy handling (e.g. quick change gridset system) and hygiene features which win over anyone who knows about dicing.

- Top cutting quality thanks to sensor-based cutting technology (TREIF patent), AVS (Automatic pre-compression system) and residual piece optimisation
- Small cleaning effort thanks to the hygienic design (e.g. hygiene cylinder) that is thought out to every detail for optimum cutting conditions
- Ideal cutting conditions thanks to product specific accessories,
 e.g. gentle cut gridset for tender products like fresh meat
- Scale for packing units of a prescribed weight (optional); remote maintenance (optional)
- Realisation of individual requirements with the TREIF team who is specialised in these kind of applications





Max. capacity (t/h) (Theoretical maximum value)	0.8; 1,764 lbs
Cutting chamber size wxh (mm/inch)	96 x 96; 3 ⁴ / ₅ " x 3 ⁴ / ₅ "
Max. infeed length (mm/inch)	300; 11 ⁴ / ₅ "
Connecting load (kW)	1.0 (230 V/1ph)
Products	0 2 0
Features	Flexible, compact, powerful



FLEXON

Max. capacity (t/h) (Theoretical maximum value)	1.4; 3,086 lbs
Cutting chamber size wxh (mm/inch)	96 x 96; 3 ⁴ / ₅ " x 3 ⁴ / ₅ "
Max. infeed length (mm/inch)	550; 21 ⁷ / ₁₀ "
Connecting load (kW)	1.2
Products	* ***
Features	Pre-filling chamber









Max. capacity (t/h) (Theoretical maximum value)	2.0; 4,410 lbs
Cutting chamber size wxh (mm/inch)	96 x 96; 3 ⁴ / ₅ " x 3 ⁴ / ₅ "
Max. infeed length (mm/inch)	550; 21 ⁷ / ₁₀ "
Connecting load (kW)	2.0
Products	0 2 4
Features	Pre-filling chamber



TWISTER basic

Max. capacity (t/h) (Theoretical maximum value)	2.0; 4,410 lbs
Cutting chamber size wxh (mm/inch)	120 x 120; 4 ⁷ / ₁₀ " x 4 ⁷ / ₁₀ "
Max. infeed length (mm/inch)	550; 21 ⁷ / ₁₀ "
Connecting load (kW)	4.0
Products	7
Features	Pre-filling chamber, Basic model of the TWISTER- Family





Max. capacity (t/h) (Theoretical maximum value)	3.5; 7,716 lbs
Cutting chamber size wxh (mm/inch)	120 x 120; 4 ⁷ / ₁₀ " x 4 ⁷ / ₁₀ "
Max. infeed length (mm/inch)	550; 21 ⁷ / ₁₀ "
Connecting load (kW)	4,5/ 6,0 (optional)
Products	024
Features	Pre-filling chamber



TWISTER SP+

Max. capacity (t/h) (Theoretical maximum value)	3.5; 7,716 lbs
Cutting chamber size wxh (mm/inch)	120 x 120; 4 ⁷ / ₁₀ " x 4 ⁷ / ₁₀ "
Max. infeed length (mm/inch)	550; 21 ⁷ / ₁₀ "
Connecting load (kW)	6.0
Products	* ***
Features	Premium cube function (optional)









Max. capacity (t/h)	4,0; 8,818 lbs
(Theoretical maximum value)	
Cutting chamber size wxh (mm/inch)	120×120 ; $4^{7}/_{10}$ " × $4^{7}/_{10}$ "
Max. infeed length (mm/inch)	620; 24²/ ₅ "
Connecting load (kW)	7.5
Products	* ***********************************
Features	



Max. capacity (t/h)	4.5; 9,920 lbs
(Theoretical maximum value)	
Cutting chamber size wxh (mm/inch)	150×150 ; $5^{9}/_{10}$ " × $5^{9}/_{10}$ "
Max. infeed length (mm/inch)	620; 24 ² / ₅ "
Connecting load (kW)	15.0
Products	
Features	One machine for dicing fresh and
	frozen meat





AVITOS

Max. capacity (t/h)	2.0; 4,409 lbs
(Theoretical maximum value) Cutting chamber size wxh (mm/	210 v 120 · 8 ³ /10" v 4 ⁷ /10"
inch)	
Max. infeed length (mm/inch)	620; 24 ² / ₅ "
Connecting load (kW)	12,5
Products	
Features	Dicing of products down to -18°C/ -0.4°F

CASAN 200

Max. capacity (t/h) (Theoretical maximum value)	3.0 ; 6,614 lbs
Cutting chamber size wxh (mm/inch)	200 x 120; 7 ⁹ / ₁₀ " x 4 ⁷ / ₁₀ "
Max. infeed length (mm/inch)	550; 21 ⁷ / ₁₀ "
Connecting load (kW)	9.0
Products	* 4
Features	Specialist for cheese









- The whole machine accessory is always within reach
- Simple cleaning by storing the machine components as blade and conveyor belt on the accessory trolley



Balance

- Precisely portioned packing units/economy packs
- Deviation from the rated weight is maximally +/-0,3 %
- Ensuring the weight of each packing unit
- For packages up to 50 kg/110 lbs
- Automatic weight correction in case of deviation from the prescribed weight
- Portioning in E containers, cartons and vacuum bags
- Cleaning with flowing water















Portion cutting with TREIF - the benefits at a glance:

The greater the accuracy of the slices, the greater your profits – fast and direct. Use the advantages offered to you by the precision sickle blade and intelligent product holder.

Thanks to the DVS, exact slices are no accident. The DVS (Dynamic feed system) guaran-tees continuous, careful product transport adjusted to that particular product right to the blade. Product movement is minimised – an important prerequisite for precisely cut slices.

- Powerful and simultaneously precise portioning, e.g. of cutlets, steaks, schnitzel and many more fresh, cooled or frozen products
- · Yield-optimised portion cutting
- Perfect cut thanks to DVS and precision sickle blade
- Profit maximization thanks to innovative technology, e.g. due to intelligent product holder
- Acceleration of production due to automated processes
- Fulfils highest hygiene requirements





PUMA F / FB

Max. cuts per minute	400
Cross-section of product wxh (mm/inch)	220 x 240; 8 ³ / ₅ " x 9 ¹ / ₂ "
Max. infeed length (mm/inch)	700; 27³/₅"
Connecting load (kW)	3.4 / 3.5
Products	Up to -4 °C/24.8 °F

PUMA E / EB

Max. cuts per minute (with double blade)	400
Cross-section of product wxh (mm/inch)	220 x 240; 8 ³ / ₅ " x 9 ¹ / ₂ "
Max. infeed length (mm/inch)	700 / 1,100; 27 ³ / ₅ " / 43 ³ / ₁₀ "
Connecting load (kW)	3.4 / 3.5
Products	Up to -4 °C/24.8 °F
Features	Dividing the product into cutting sections, packets possible









Max. cuts per minute (with double blade)	400
Cross-section of product wxh (mm/inch)	350 x 240; 13 ⁴ / ₅ " x 9 ¹ / ₂ "
Max. infeed length (mm/inch)	700; 27³/₅"
Connecting load (kW)	3.4 / 3.5
Products	Up to -4 °C/24.8 °F



LION E/EB

Max. cuts per minute (with double blade)	400
Cross-section of product wxh (mm/inch)	350 x 240; 13 ⁴ / ₅ " x 9 ¹ / ₂ "
Max. infeed length (mm/inch)	700; 27³/₅"
Connecting load (kW)	3.4 / 3.5
Products	Up to -4 °C/24.8 °F



LION bacon

Max. cuts per minute	300
Cross-section of product wxh (mm/inch)	270 x 108; 10 ³ / ₅ " x 4 ³ / ₁₀ "
Max. infeed length (mm/inch)	620; 24 ² / ₅ "
Connecting load (kW)	3.3 / 3.4
Products	Very low temperatures
Features	Specialist for bacon products







FALCON hybrid basic

For bone-in or boneless products – always focussing on your yield

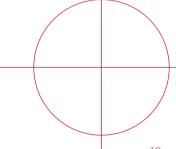
Max. cuts per minute (Theoretical maximum value)	550
Cross-section of product wxh	depending on application, max. up to
(mm/inch)	260 x 155; 10 ¹ / ₅ " x 6 ¹ / ₁₀ "
Max. infeed length (mm/inch)	1,000; 39 ³ / ₁₀ "
Connecting load (kW)	8.6 without check weigher;
	9.6 with check weigher
Products	Up to -4 °C/24.8 °F
Features	Weight controlled, yield optimised slicing, continous infeed system

Thanks to the FALCON hybrid basic, you can benefit from the **technical advances** on offer from TREIF even if you are working with boneless meat.

Making sure that you get as much as you can when cutting products, we will get one more slice for you from every piece, be it **boneless or bone-in**, whether you are cutting to an exact weight or to a set thickness.

A unique 4D camera system joins forces with **top-speed computer technology**. Want to bet that your product has never before been measured this precisely?













Max. cuts per minute (Theoretical maximum value)	550
Cross-section of product wxh (mm/inch)	depending on application, max. up to 260×180 ; $10^{1}/_{5}$ \times $7^{1}/_{10}$ "
Max. infeed length (mm/inch)	gripped: 800; 31 ¹ / ₂ "
Connecting load (kW)	10.3 without check weigher; 11.3 with check weigher
Products	Up to -4 °C/24.8 °F
Features	Weight controlled, yield optimised slicing with high speed; extremely high throughput

High-speed cutting with extremely high throughput and continuously reliable **precision** – this is what the FALCON evolution stands for.

Based on nearly twenty years of experience in the area of cutting precisely weighed portions, TREIF developed the FALCON evolution which, compared to the entry level model FALCON hybrid basic, achieves a **massive increase** in performance. The unbeatable speed is especially due to the far-sighted **optimisation** of the individual processes.



A look into the machine (photo above) also shows a **revolutionary** and unparalleled openness. With this **Premium-Hygiene-Design**, the hygiene standard is reinterpreted.

Sophisticated technology

A stable product is extremely important for cutting. No precision without absolute stability. No **optimum yield** without precision.

The driven, contour-controlled TREIF retainer, which – together with the product gripper – provides a high degree of stability for the product during cutting, is an important component with regard to precision. Thanks to **highly modern technologies**, the blades are quided along the product contours.







FALCON robotic Shorter changeover time. Higher quality. More yield.



Max. picking capacity/min (per robot)	80 (single gripper)
Max. picking capacity/min (per robot)	125 (double gripper)
Products	Boneless and bone-in
Gripper systems	Vacuum and finger gripper
Gripper change	Quick-change system without tools
Packaging shapes	Flat Trays, MAP, Slimfresh, Deep drawing unit

Packaging sizes	Application-dependent
Number of tray lanes	1 or 2
Max. product weight (kg/lb)	3; 6.6 (with gripper)
Size of robot work envelope (mm/inch)	1,130; 44 ¹ / ₂ "
Length with FALCON evolution (mm/inch)	ca. 12,000; approx. 472 ⁷ / ₁₆ "
Width / Height (mm/inch)	2,200 / 2,500; 86 ³ / ₅ " / 98 ²⁷ / ₆₄ "
Connecting load (kW)	20

Your benefits at a glance

- Fewer personnel hours required and omission of shift changes through automation save costs and time at the same time
- The 4D camera system completely captures and calibrates the product
- Fully automatic sorting and placement process using robot technology for cutting with or without bones
- Also ideal for cutting according to slice thickness or weight specification
- Portioning of a product into different weights at the press of a button - calculation of the optimum slice thickness to achieve the target weight
- Highly flexible cutting system with different optional modules such as pre-weigher/dynamic portioning separator/grouping unit/weight check scales/sorting station with pusher(s), e.g. separation of underweight or overweight slices (optional)/flip-flop belt























Slicing with TREIF – the benefits at a glance:

Precise slices, perfect product presentation – that's "usual business" for TREIF slicers. With the new slicer generation you can now even save energy costs. They do not need idle cuts like other slicing systems. They therefore require **fewer blade rotations for achieving the same output.** This allows **slicing at higher product temperatures** which considerably reduces the costs for product tempering.

 More time, less energy costs due to slicing at higher product temperatures (ECO SLICING)

- SUCCESS innovation award 2013 for TREIF technology for continuous slicing
- Full benefits of TREIF slicers: increased drive power and dynamics, reduced non-productive times, maximum process safety, increased capacity and even more flexibility at the customer's request
- Perfect product presentation due to SAS
- Various expansion modules up to a fully automated line
- Easy, time-saving cleaning due to open design of the machine
- Patented vacuum gripper specially for soft products (optional)





Max. cuts per minute (Theoret. max. value)	900
Cross-section of product wxh (mm/inch)	280x160; 11" x 6 ³ / ₁₀ "
Max. infeed length (mm/inch)	600; 23 ⁵ / ₁₈ "
Connecting load (kW)	2.8
Products	
Features	Entry level model, Stand- Alone



DIVIDER orbital 400+

Max. cuts per minute (Theoret. max. value)	1,600
Cross-section of product wxh (mm/inch)	280 x 160; 11" x 6 ³ / ₁₀ " 320 x 130; 12 ³ / ₅ " x 5 ¹ / ₁₀ " (optional)
Max. infeed length (mm/inch)	850; 33 ² / ₅ " / 1,000; 39 ³ / ₁₀ " (optional)
Connecting load (kW)	4.8
Products	Somme 2
Features	Line solutions









DIVIDER 660+

Max. cuts per minute (Theoret. max. value)	2,640
Cross-section of product wxh (mm/inch)	320 x 130; $12^{3}/_{5}$ " x $5^{1}/_{10}$ " 280 x 160; 11" x $6^{3}/_{10}$ " or Ø 220; $8^{3}/_{5}$ "
Max. infeed length (mm/inch)	850; 33 ² / ₅ " / 1,000; 39 ³ / ₁₀ " (optional)
Connecting load (kW)	4.8
Products	
Features	Large infeed chamber

DIVIDER 660+ with cross-sorting line

Max. cuts per minute (Theoret. max. value)	2,640
Cross-section of product wxh (mm/inch)	320 x 130; 12 ³ / ₅ " x 5 ¹ / ₁₀ " 280 x 160; 11" x 6 ³ / ₁₀ " or Ø 220; 8 ³ / ₅ "
Max. infeed length (mm/inch)	850; 33 ² / ₅ " / 1,000; 39 ³ / ₁₀ " (optional)
Connecting load (kW)	5.5
Products	





HS_divider

- A sharpening device for manual sharpening of all sickle blades for TREIF slicers
- Easy and safe operation; production safety thanks to durable sharp blades for continuously clean cuts
- Diamond-set sharpening tools
- Other models on request





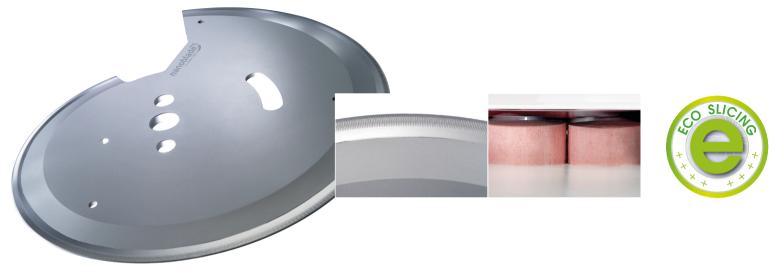




Vacuum gripper: More yield – more production reliability

- Minimisation of residual pieces: more yield
- Reliable holding of soft products and thus increased production reliability
- Specially-suited for products such as boiled and cooked sausage, cheese without holes, cooked ham and plant products such as tofu
- Double the security with the 2-chamber system: the vacuum gripper does not just create a vacuum in one, but in 2 different chambers

- High degree of cost-efficiency due to minimisation of residual pieces
- Optimal hygiene conditions, especially through fixed/passive vacuum (no vacuum pump)/easy and fast cleaning
- The vacuum gripper or automatic gripper is optionally available for all TREIF slicers



Slicing with lotus engraving: So that the slice arrives where it belongs

Slice so **many different products** without the slices sticking. TREIF's own in-house blade manufacturing has now developed the lotusengraved slicer blade.

The blade's special engraving gives it a **non-stick effect**, even with soft products, like cooked sausage, cooked ham or cheese. This results in **perfect**, **clean presentation**. Cutting processes in your production plant will run **smoothly and thus more efficiently**.

In addition, the products do not have to be cooled down that much. This means **much less effort for logistics and product tempering** and therefore **less energy cost**.

Thanks to its **in-house blade manufacturing**, TREIF's blade expertise makes this possible: the development and production of an engraved blade, which creates a thin "cushion of air". Lotus engraving: **patented by TREIF**.







The complete package from the cutting specialist: slice now even more efficiently with TREIF *nanoblades*

TREIF nanoblades. Use 100 % of your cutting machine's potential by using the optimum blade. TREIF develops and manufactures machine and blade as one unit – the only way to achieve an **optimum** cutting result.

And – at the end of the day, you also save cost. TREIF blades are designed for a **long service life**. High quality steel, complex manufacturing processes on the highest level including sophisticated mechanisms for engraving the blade and a sharpening service that focuses on fast sharpening as well as on quality and a long service life of the blades – all this speaks for itself.

Ideal cutting conditions, consistent cutting quality due to best possible interaction between TREIF quality blades and TREIF machine

- Best possible use of your cutting machine's potential and consequently higher yield
- · High degree of process reliability
- Sharpening devices for TREIF blades (HS models)
- Long cutting-edge life and long service life of the blade through use of high-quality blade steel, lowest possible tolerance limits in manufacturing and professional, low-wear sharpening and regrinding



Blade and machine from one source: the optimum for your products

 No risk of damage or additional wear on other machine parts (e.g. bearing, cutting frame) through non-expert blade treatment

For our **in-house blade manufacturing**, specialists implement the requirements set by the TREIF engineers for "blade development" with complete accuracy and the lowest possible tolerance limits.

Regular regrinding is necessary as only sharp blades will deliver top cutting results. We offer a **service for sharpening and regrinding**

your TREIF *nanoblades*. The process is gentle on the blades and produces only low wear. Toothed blades, for example, are not just reground. The toothing is precisely recreated one by one.

We work with utmost meticulousness to ensure that no residue (e.g. metal particles) remains and that the cutting quality is of the highest level. Your blade lasts for a very long time – a worthwhile investment!







nanoblade LongLife
The optimum in durability:

TREIF nanoblade LongLife: Use 100 % of your **FALCON** portion cutting machine's potential by using the optimum blade. TREIF develops and manufactures machine and blade as one unit – the only way to achieve an **optimum** cutting result.

And – at the end of the day, you also save cost:

TREIF blades are designed for a **long service life** and are an absolute **market innovation**. High quality steel, complex manufacturing processes on the highest level including sophisticated mechanisms for engraving the blade and a sharpening service that focuses on

fast sharpening as well as on quality and a long service life of the blades – all this speaks for itself.



TREIF *nanoblade LongLife* – Your benefits at a glance:

- Up to 5-10 times longer service life* than blades without LongLife characteristics
- Increased break resistance up to factor 5
- Increased corrosion resistance
- Maximum process reliability and perfect cutting capacity due to ultra smooth and homogeneous designed structures
- High cutting durability due to optimal, innovative alloy contents
- Economical grinding and sharpening cycle at TREIF
- No investment needed in sharpening machines



Calculate your advantage: www.treif-tco.com





^{*} in compliance with the defined process parameters and use of our TREIF service for sharpening



Slicing competence concentrated in one room: TREIF Customer Center

A single room in which you can experience the concentrated slicing competence of TREIF from four Competence Units: that is the Customer Center in Oberlahr. Familiarise yourself with the wide range of TREIF food cutting technology. What awaits you: expert advice and innovative machines from the areas of DICING, PORTION CUTTING, SLICING and BREAD CUTTING.

We offer you the opportunity to test the performance capacity of our machines and systems live, on location. You are welcome to bring your products along for a test cut.

Just make an appointment with your TREIF representative or send us your inquiry via email under info@treif.com (subject: Customer Center).

We look forward to welcoming you to our Customer Center!



More product information

You are interested in first class of slicing fresh bread without any blade lubrication?

In this case, we are also the right partner for you!

Feel free to contact us - we look forward to hearing from you!











HEADQUARTERS:

TREIF Maschinenbau GmbH Toni-Reifenhäuser-Str. 1 D - 57641 Oberlahr +49 26 85 944 0 Fax +49 26 85 10 25 E-Mail: info@treif.com

LOCATIONS:

TREIF USA Inc. 50 Waterview Drive, Suite 130 USA - Shelton CT 06484 Tel. +1 203 929 99 30 Fax +1 203 929 99 49 E-Mail: treifusa@treif.com

TREIF S.A.R.L 22, rue des Tuileries F - 67460 Souffelweyersheim Tel. +33 3 88 184 018 Fnx +33 3 88 184 019 E-Mail: info-france@treif.com

TREIF in Belgium TREIF Sp. z o.o PL - 01-864 Warszawa Service + 48 506 413 197 E-Mail: jo.luupaert@treif.com E-Mail: infopl@treif.com

TREIF U.K. Ltd. TREIF Italia S.r.I Genesis House, Poole Hall Road, Via Sant'Agnese 43-45 Poole Hall Industrial Estate IT - 40132 Bologna Ellesmere Port, GB - Cheshire CH66 1ST Tel. +39 051 72 81 38 Tel. +44 151 35 06 100 E-Mail: info.it@treif.com Fax +44 151 35 06 101

ul. Jana Kochanowskiego 49 + 48 506 412 522

E-Mail: treifuk@treif.com

Here you can find our locations and over 150 partners at a glance.



TREIF CHINA

Shanghai Representative Office Room 212, No.188 Zhangyang Rd. PRC-Shanghai 200120 China Tel. +86 21 5879 8255 Fax +86 21 5879 8256 E-Mail: treif.china@treif.com

Villalaan 21 B - 9320 Aalst +32 53 770 813 Tel. +32 53 789 666

www.treif.com