



Roll Concept®
Designer and Manufacturer

Industrial rollers standard or tailor-made

Because we know that your process defines
your needs, take advantages of a standard or
customised Alveotube™ !



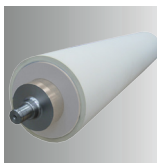
Low
inertia

ROLL
eco
CONCEPT

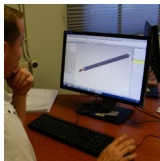
Power saver



The right
roller
to the right
place!



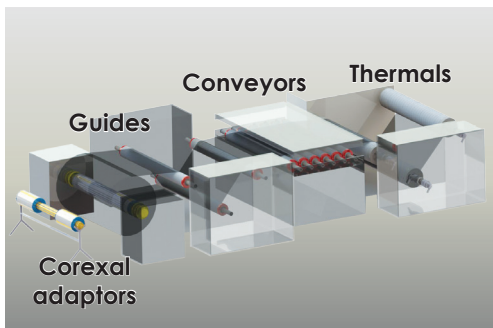
Material
recommen-
dations



Engineering



Assemblies
Surface
finishings

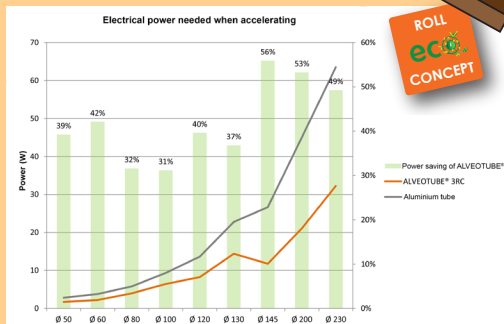


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Why choosing Alveotube™

Thanks to their low inertia, using Alveotube™ rollers allows you to **save power**:

- Motorized rollers need less electrical power during line acceleration phase
- Idler rollers apply less web tension: reduced resisting torque



How your roller will be made?

From simple profile, to turnkey solution

1

Our profiles are extruded in France with our own Alveotube™ die

2

Once in our workshop, depending on your needs, we perform different technical operations on your roller :

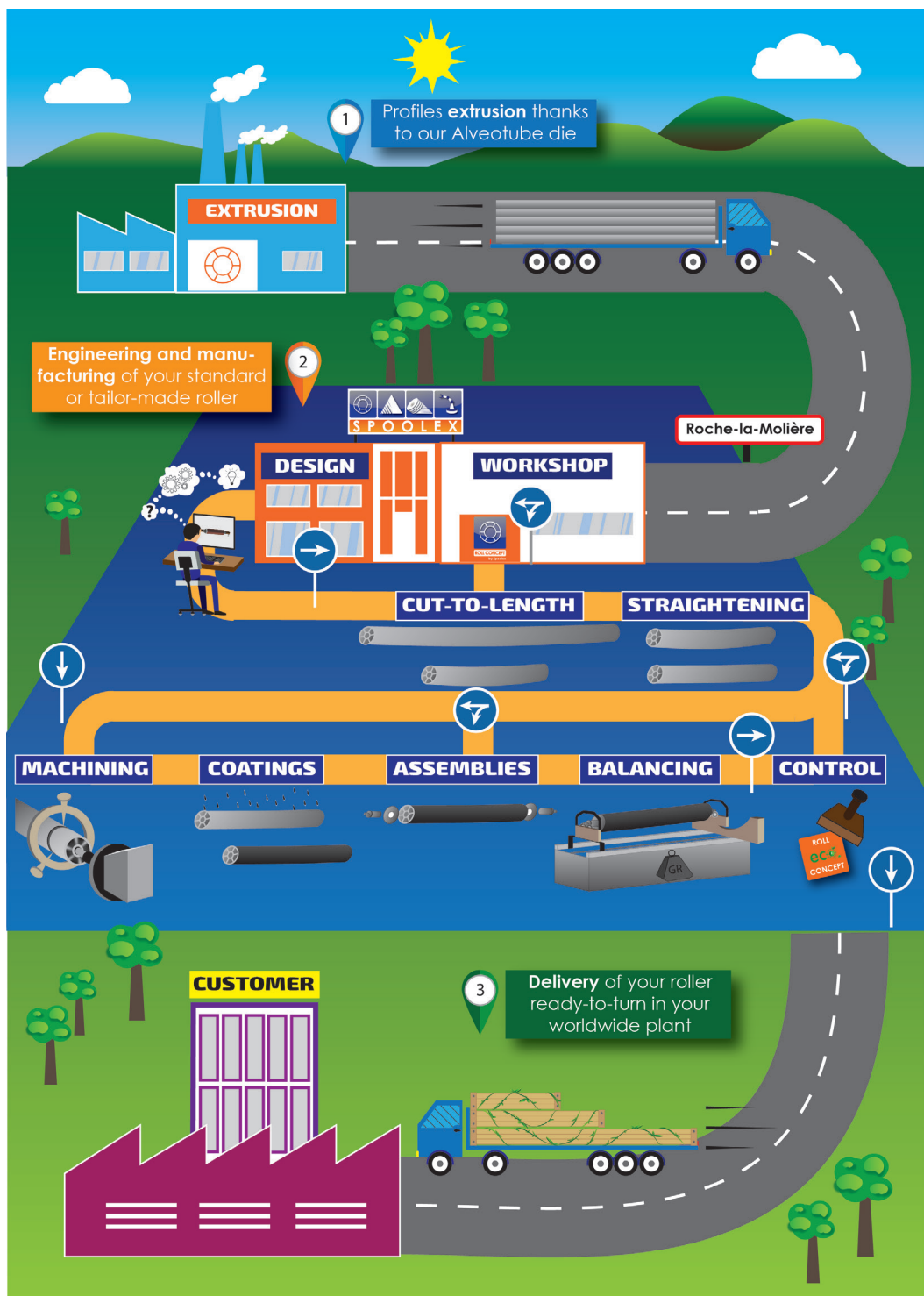
- Your need is «standard»: the profile will be at least cut-to-length, straightened and controlled
- Your need is specific: first it will be studied by our integrated Engineering Department to be technically and economically defined

Depending on your process, our experts will recommend different operations :

- **Machining** : drilling and/or surface machining to increase even more the natural advantages of our profile
- **Coatings**: lining, plasma spraying, chromium plating, anodization, Teflon, etc., depending on your roller function and products to be handled
- **Assemblies**: journals, different inner or outer ball bearing types... depending on your roller function
- **Balancing**: static to reduce imbalance or dynamic to reduce vibrations

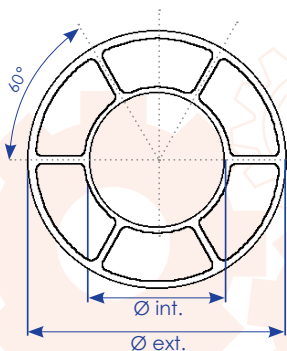
3

Whatever the operations performed, your roller will be then **controlled** and carefully **packed**, before to be **delivered** wherever you are in the world!



ALVEOTUBE™

ALVEOTUBE™ 3RC profiles are made of one external tube and one internal tube, linked together by 6 radial blades, providing alveolus.



ADVANTAGES

One single alveolar structure, but several advantages depending on your needs:

- From small length roller with low inertia,
- Up to 6.5 m roller combining bending resistance and low inertia
- Can be used rough depending on process

CHARACTERISTICS

Wide range of assemblies defined depending on your process:

- No standard
- Study of the most technically and economically adapted assembly

Wide range of **surface coatings**:

- Hard anodization,
- Extra polished carbide,
- Hard chrome plating,
- Plasma, anti-adhesive plasma,
- Lining,
- Teflon®, ...

Wide range of **surface finishings** depending on line speed and roll positioning:

- Rough or surface machined,
- Static or dynamic balancing

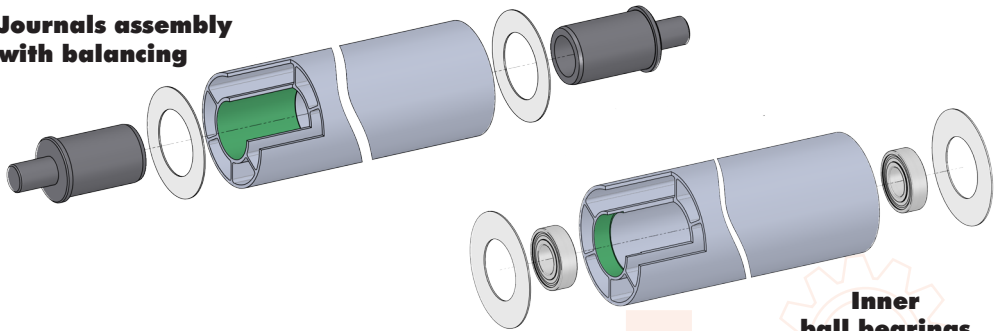


The range

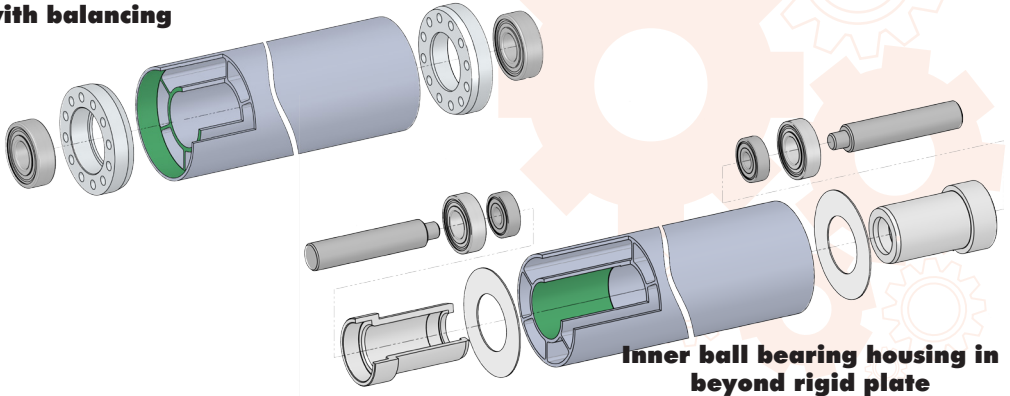
Reference	External Ø (mm)	Internal Ø(mm)	Weight per meter (kg)	Second moment of area (mm ⁴)	Inertia (g.mm ²) for one meter
3RC 48	48,3 ^{±0,3}	27 ^{±0,2}	1,2	101 586	558 715
3RC 60	60 ^{±0,3}	31 ^{±0,2}	1,8	201 571	1,088.10 ⁶
3RC 76	77 ^{+0,7/-0,3}	45 ^{+0,3/-0,5}	4,11	727 516	3,928.10 ⁶
3RC 80	81 ^{+0,7/-0,3}	40 ^{+0,3/-0,5}	3,2	665 597	3,594.10 ⁶
3RC 100	101 ^{+0,6/-0,3}	45 ^{±0,4}	5,3	1 703 730	9,200.10 ⁶
3RC 120	121 ^{+0,7/-0,3}	60 ^{±0,4}	6,5	3 027 662	16,349.10 ⁶
3RC 130	131 ^{+0,7/-0,3}	70 ^{±0,4}	10,6	6 162 454	33,277.10 ⁶
3RC 145	145 ^{±0,5}	70 ^{±0,4}	9,3	6 169 528	33,315.10 ⁶
3RC 200	201 ^{±1,2}	106 ^{±0,7}	16,5	20 664 981	111,590.10 ⁶
3RC 230	230 ^{±1,5}	152 ^{+0,2}	18,9	34 598 085	186,829.10 ⁶

Example of assemblies

Journals assembly with balancing



Outer ball bearings with balancing



Inner ball bearing housing beyond rigid plate

Our other products



INDUSTRIAL WINDING CORES

For web products winding and rewinding

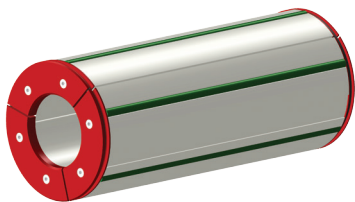
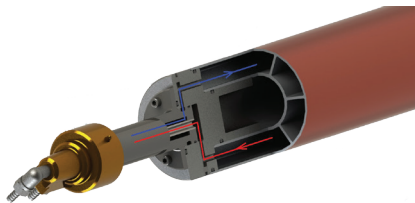
- Used on squared bars or 6'' expanding shafts
- Resistant to corrosion
- Reusable and long life time
- Light and rigid
- Alveolar structure with low inertia

THERMAL TRANSFER ROLLS



Two ranges depending on your needs:

- Aluminium: cooling roll with low rotation inertia
- Steel: cooling or heating roller with better thermal precision



COREXAL ADAPTOR

To transform in few seconds your 3'' expanding shaft into 6'' one

- Can be adapted on any 3'' expanding shaft
- No damage of the expanding shaft
- Light weight
- Easy to install, without any tubing or adaptation
- No specific tools needed
- Easy maintenance

Distribution

ROLL CONCEPT

by Spoolex

Exclusive European
distributor of



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 & 45001

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