The Smooth Revolution: BALIQ

Follow the Flow of Intelligence!
Coatings that write history. Experience BALIQ!

A technological milestone has been achieved: BALIQ™ - the new coating generation by Oerlikon Balzers. It is based on our S3p® technology (Scalable Pulsed Power Plasma) that intelligently combines the advantages of arc evaporation and sputtering. The result is BALIQ™, a new family of wear-resistant coatings with revolutionary properties for a unique spectrum of applications. You benefit from new possibilities that transcend anything seen before – with coatings tailored precisely to your needs.

Revolutionary smoothness
BALIQ™ enables smooth chip removal and eliminates the need for mechanical post-treatment. Adhesion and build-up edges are avoided even with difficult-to-machine materials.
High density
The density of BALIQ™ coatings is very close to the theoretically possible greatest density. High toughness and high resistance to crack propagation and diffusion are salient features.

Excellent hardness
Among other benefits, the excellent coating hardness of BALIQ™ results in high abrasive wear resistance.

Exceptional precision
High precision in coating thickness distribution guarantees extremely sharp edges. Outstanding results are achieved especially with tools that have ultra-small diameters.
Remarkable scalability

Customised coatings are possible thanks to the precise and independent scalability of pulse duration and shape as well as current density. The limits of conventional HiPIMS are overcome with the unique process window as well as significantly higher deposition rates and process stability.

![Diagram showing pulse duration and plasma density](image)

- **Remarkable scalability**
- **Very good adhesion**
- **Extraordinary coating design**

**Remarkable scalability**

Customised coatings are possible thanks to the precise and independent scalability of pulse duration and shape as well as current density. The limits of conventional HiPIMS are overcome with the unique process window as well as significantly higher deposition rates and process stability.

**Very good adhesion**

BALIQ™ coatings feature an exceptionally strong coating/substrate bond. High adhesion guarantees long and reproducible tool service lives.

**Extraordinary coating design**

Many different materials can be used for the coatings. This versatility is ideal for application-specific coating solutions.
Tailored to your requirements!
Are you ready for the new BALIQ coating generation? Contact us now!

**Headquarters**
Oerlikon Balzers Coating AG
Balzers Technology and Service Centre
Iramali 18
LI-9496 Balzers
Liechtenstein
T +43 388 7500
www.oerlikon.com/balzers

**Liechtenstein**
Oerlikon Balzers Coating AG
Coating Centre
Iramali 18
LI-9496 Balzers
T +43 388 5701
www.oerlikon.com/balzers/ch

**Japan**
Oerlikon Nihon Balzers Coating Co., Ltd.
7-2-2 Shinomiya, Hiratsuka-City, Kanagawa-Pref. Japan 254-0014
T +81 463 54 2220
www.oerlikon.com/balzers/jp

**Korea**
Oerlikon Balzers Coating Korea Co. Ltd.
Standard factory #3, 15, Jayumyeok 2-gil
Jeollabuk-do
Gunsan 573-540
South Korea
T +82 63 460 9901
www.oerlikon.com/balzers/kr

**USA**
Oerlikon Balzers Coating USA Inc.
1475 E. Woodfield Road
Suite 201
Schaumburg, IL 60173
United States
T +1 847 619 5541
www.oerlikon.com/balzers/us

Our worldwide coating centre network addresses are listed at:
www.oerlikon.com/balzers