

# Steam Ejectors Save Energy in the Drying Stage of Textile Coloration



### **BAELZ USE CASE #18**

Industry: Textile

Company: Printing and dyeing factory

Location: Hebei Province, China

Baelz Technology: Controlled steam ejectors Jetomat ®

#### **ORIGINAL SITUATION**

A 3-row drying stage, each row consisting of 12 drum dryers and controlled by a control valve, with one steam trap after each drum.

Parameters:

P01 = 5.5 bar

P02 = 3 bar

M01 = 200-600 kg/h depending on the material

#### TECHNICAL ENHANCEMENT

The control valves were replaced with baelz 590 steam ejectors.

Current parameters:

P01 = 5.5 bar

P03 = 1.5 bar

P04 = 2 bar

# **SAVINGS**

According to the end customer, approx. 20% steam is saved.

Monthly steam consumption before retrofit: 2.6 t
Monthly steam consumption after retrofit: 2.2 t

Additionally, the steam traps after each drum are no longer necessary.

## ADVANTAGES OF STEAM EJECTOR TECHNOLOGY

Use of a controlled steam ejector instead of a control valve improves the performance of the consumer in the following respects:

- higher average steam velocity in the drum
- thinner condensate layer in the drum makes for uniform heat distribution and better drying quality
- increased production speed
- reduced steam consumption









