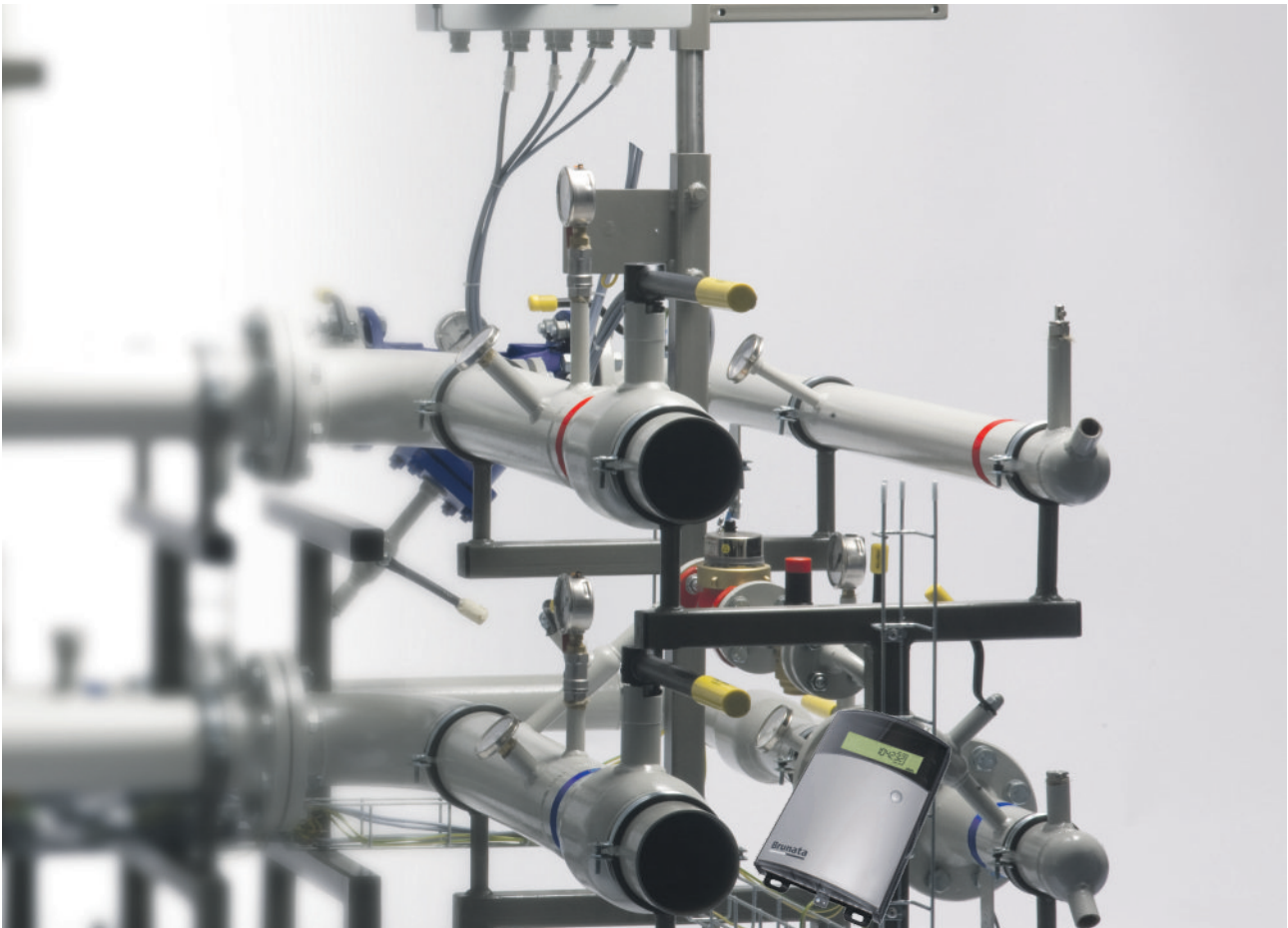


Dalsia Brunata

district heating substations



Optimising resources with
Danish substation solutions

Dalsia Brunata substations

Linking energy networks

A substation functions as the link between the district heating plant and your local heating circuit. It separates the water circuits physically and transfers the exact amount of heat / energy needed in the building under all conditions.

The Dalsia Brunata substation is the optimum solution for connecting to the district heating network and serves the different heating requirements of most buildings - residential as well as industrial.

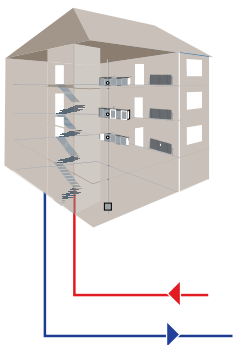
Today, district heating is recognised as the most flexible and environmentally safe way of distributing energy for heating and domestic hot water. Many countries already have comprehensive district heating networks, and expansion is ongoing.

Dalsia Brunata System Design

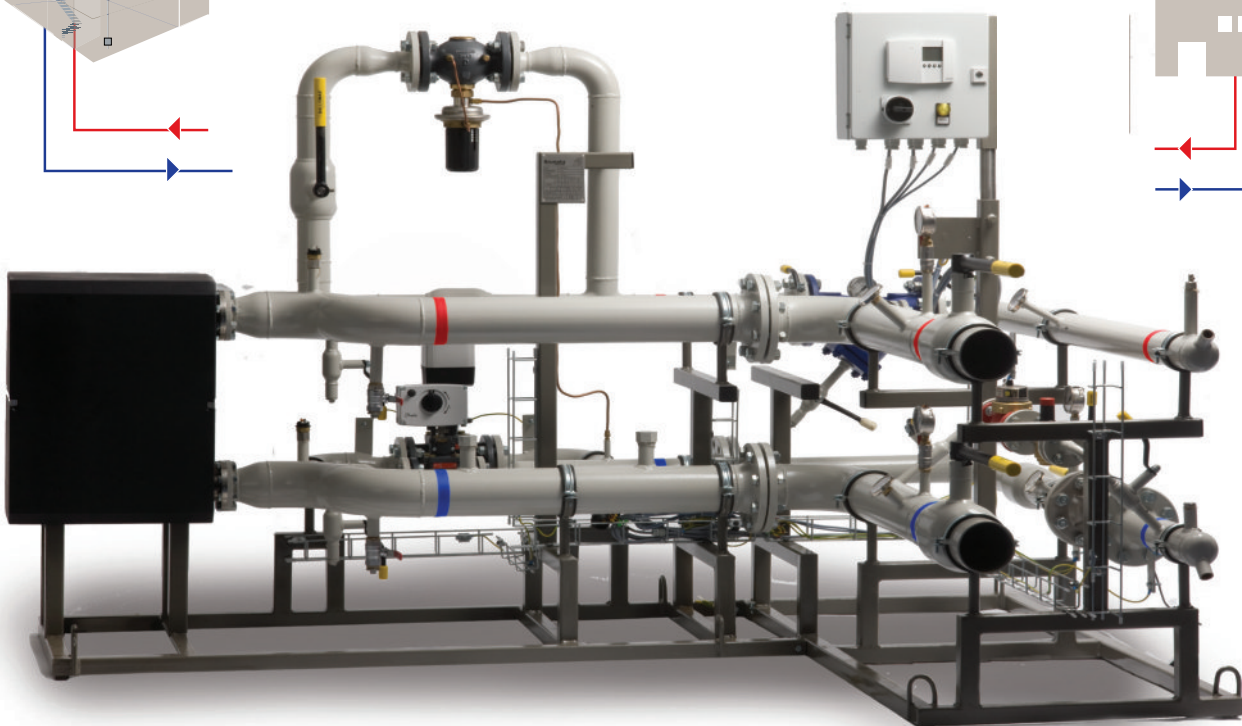
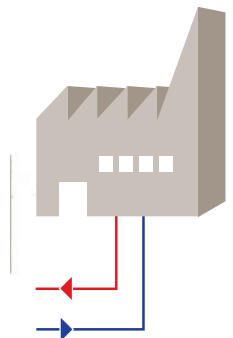
Dalsia Brunata System Design is the name of Brunata's own dimensioning software. It ensures that your local Brunata representative can provide you with the

optimum solution for all scenarios based on your wishes and unique system parameters. In all senses Dalsia Brunata System Design makes the construction and daily operations easy with:

- 3D modeling
- on-line configuration
- components versatility
- prefabricated insulation on request



Dalsia Brunata lets you control the power of your district heating connection with ease. It is a solution for all heating purposes from single heating circuits to advanced, energy efficient multiple heat exchanger constructions including DHW.

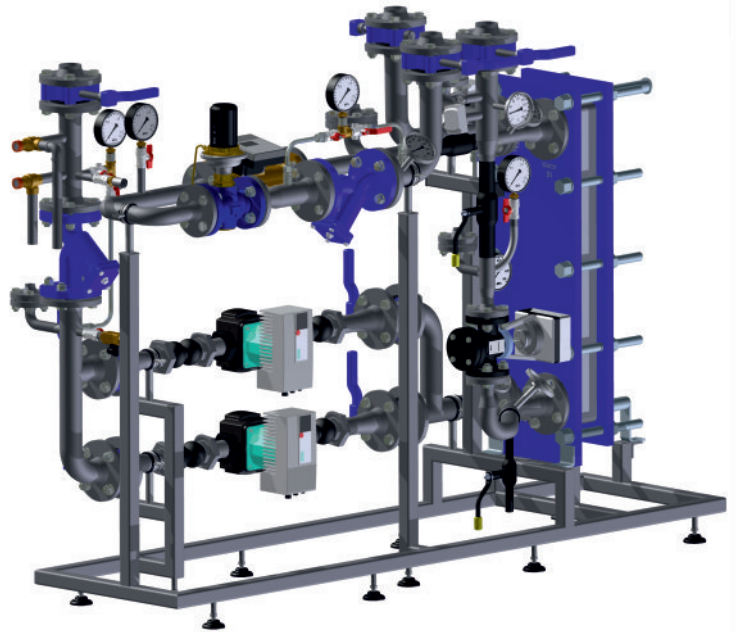


Dalsia Brunata substations

Dalsia Brunata - easy and efficient

Dalsia Brunata solutions have served international markets since 1993 with a continuous improvement in design and production capability. What started as a basic production unit is now a fully fledged and modern substation factory with the capacity of making thousands of substations per year. Today, Brunata provides need based modular substationsolutions including:

- a compact design with a logical system layout that makes it easy to transport, install, service and operate
- a complete "plug & heat" solution that makes the installation phase easy for installers, consultants and building supervisors increasing overall productivity and profitability
- IQ possibilities - Brunata's own developed software SiDiO is an implementation of data acquisition SCADA system and supervisory control. Heating network and building connection station are easily monitored and controlled. The visualization of all relevant data is arranged in a graphical software interface.
- on-line support everywhere - the client is able to contact our support team via our internet support centre. The response is sent within 48 hours in client's own language.



Accurate CAD 3D models with complete schematics are available for all Dalsia Brunata solutions. Customised models are made on demand.

Examples of Dalsia Brunata substations

DHW KW	Central heating KW	Overall dimensions, mm LxDxH	Weight, kg	Connections Prim - Sec - DHW
50	100	1200x600x1200	68	DN20 - 1 ¼" - ¾"
75	150	1200x600x1300	72	DN25 - 1 ¼" - 1"
100	200	1200x600x1300	81	DN32 - 2" - 1"
125	250	1300x700x1500	90	DN32 - 2" - 1"
150	300	1400x700x1500	93	DN40 - 2" - 1 ¼"
175	350	1500x700x1500	102	DN40 - 2 ½" - 1 ¼"
200	400	1800x700x1600	110	DN40 - 2 ½" - 1 ¼"
250	450	1800x700x1600	125	DN50 - 2 ½" - 1 ¼"
∞	∞	∞	∞	∞

Dalsia Brunata is available in sizes and custom conigurations from ~ 20KW up to 100MW+



Dalsia Brunata substations

About Brunata

Brunata's roots can be traced back to the pioneering days in the beginning of the 20th century when a Danish engineer invented a thermoelectric heat meter for radiators. Ever since then, innovation has been a key issue for Brunata, and thus, research and development continue to be core functions in our company. With almost a century of experience, Brunata offers products and services of unique quality that comply with the requirements of today's world.



Where to find us

Brunata is present in Bulgaria, Ukraine, China, Croatia, Denmark, Greece, Hungary, Italy, Norway, Poland, Romania, Russia, Serbia, Slovenia, Sweden, Turkey and has partners in Bosnia-Herzegovina, Czech Republic, Great Britain, Estonia, Latvia, Slovakia and Netherlands. Brunata technology is also present in Austria, France, Germany, Spain, Switzerland and Ukraine.

High quality - no compromise

Dalsia Brunata district heating substation is produced with patience in every detail. Furthermore, the environmentally-friendly management of productive resources and processes is essential in order to optimize the ecological presence of industry.

The production activity is certified according to the ISO 9001:2008 standard by Dekra, Germany. Brunata is also certified according to the European Pressure Equipment Directive 97/23/ES for operation with pressure equipment. All substations are CE marked, and pass exhaustive testing of all aspects from pressure tolerance to function testing of regulation equipment.

Questions or enquiries concerning Dalsia Brunata Substations?

Feel free to contact us at

E-mail sales@dalsiabrunata.com

Tel. +359 2 9155 749

www.dalsiabrunata.com

Projects references

- 2013/2014 Delivery and Installation of 100 district heating substations in Vinitza, Ukraine
- 2012/2013 Delivery and Installation of 109 district heating substations in Cherkasy, Ukraine
- 2012/2013 Delivery of district heating substations for Copenhagen, Denmark
- 2012 Delivery of 1330 district heating substations to Ptholemada Municipal District Heating Company, Greece
- 2011/2012 Supply of 1915 district heating substations and associated services to Sofia district heating company, Bulgaria
- 2011 Delivery of 107 district heating substations to Angers, France
- 2011 Delivery of 80 district heating substations for Copenhagen, Denmark
- 2009 Delivery of district heating substations to Milano, Italy
- 2009 Delivery of 60 district heating substations to Ptholemada Municipal District Heating Company, Greece
- 2009 Delivery and installation of district heating substations to Hermes Park- Sofia, Bulgaria
- 2008/2009 Supply and installation of 505 district heating substations to TO Cerak and TO Miljakovac - Belgrade, Serbia
- 2008/2009 Rehabilitation of district heating substations for Technical university - Sofia, Bulgaria
- 2002/2007 Delivery and installation of district heating substations for Business Park - Sofia, Bulgaria
- 2002/2007 Supply of 7162 district heating substations and associated services of 7162 district heating substations for Sofia District heating company, Bulgaria

Dalsia Brunata

85 Baxton Blvd. · BG-1618 Sofia
Tel. +359 2 9155 701 · Fax +359 2 9155 755
www.dalsiabrunata.com
office@dalsiabrunata.com