

45 YIL  
1980

For Dental Faculties, Dental Hospitals,  
Oral and Dental Health Centers, and Clinics:

# CENTRAL DENTAL COMPRESSED AIR AND ASPIRATOR SYSTEMS



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DMS has provided central dental compressor and aspirator systems and technical infrastructure applications in Turkey with assurance since 1980.



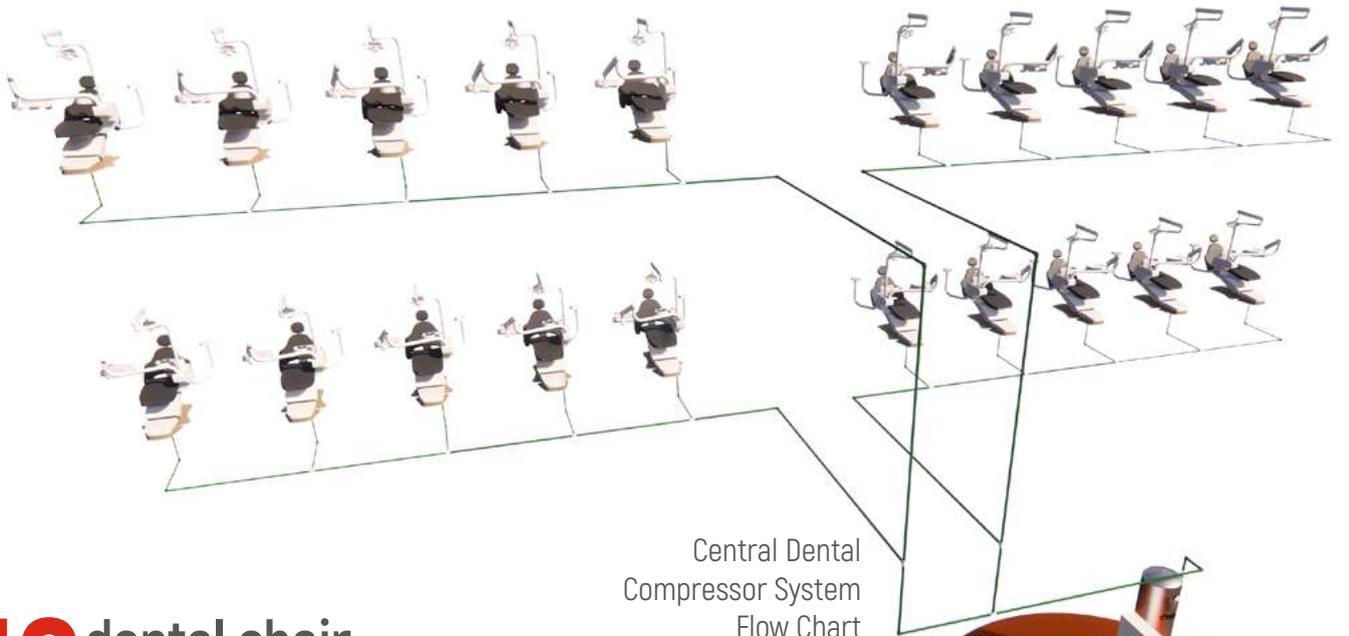
Since 1980, we have been a leading organization in Turkey, providing technical requirements and implementation services for dental education and service units of all scales, in accordance with regulations and technical standards.

From our foundation to the present, we have supported thousands of clinics with technical products and services. We have emphasized the importance of technical infrastructure in clinics, leading the industry by promoting awareness of hygiene technologies and workplace safety.





# Central Dental Compressor System



**10** dental chair...  
**100** dental chair...  
or **much more...**



# Oil-free, moisture-free

# %100

# Dental Air

Advanced Technology and Unique Design Meeting Dental Requirements

## Advantages

- Reliable and High-Pressure Air Supply
- Oil-Free, Moisture-Free, and Hygienic
- Easy Installation and Setup
- Customized Capacity Planning
- Ease of Maintenance and Periodic Servicing
- Corrosion Resistance in Humid Environments
- Reliable Service and Spare Parts

## High Efficiency

Dental faculties, dental hospitals, and oral and dental health centers have specific demands for compressed air. These demands can only be met by hygienic, reliable, and highly efficient central compressor systems. DMS Central Dental Compressor Systems provide the compressed air required for hundreds of dental treatment units from a single source, featuring advanced technology with cooling systems, dryers, and cyclone separators.

## Technical Specifications of Central Dental Compressor Systems

CENTRAL DENTAL COMPRESSOR SYSTEMS	DP 8020-20 2/4-930	DP 8020-20 3/6-930	DP 8020-20 4/8-930
NUMBER OF MOTORS	2	3	4
VOLTAGE (V)	400 V (3~)	400 V (3~)	400 V (3~)
FREQUENCY (HZ)	50	50	50
POWER RATINGS (KW)	15	22,5	30
CURRENT (A)	28,4	42,6	56,8
AIR OUTPUT AT 5 BAR (LITERS/MINUTE)	2040	3060	4080
OPERATING PRESSURE (BAR)	6-8	6-8	6-8
COMPRESSED AIR TANK CAPACITY (LITERS)	500	500	500
SAFETY VALVE ACTIVATION PRESSURE (BAR)	10	10	10
DRYER TYPE	GAS-TYPE COOLING PRINCIPLE		
DRYING CAPACITY CM <sup>3</sup>	150 - 210		
NOISE LEVEL dB(A)	94	96	98
ENCLOSURE RATING	IP20 / IP30 / IP40		
NUMBER OF DENTAL UNITS OPERABLE AT 100% CAPACITY	45	68	90
NUMBER OF DENTAL UNITS OPERABLE AT 60% CAPACITY	75	113	151

\* Noise level may vary by  $\pm 3$  dB(A) depending on the acoustic conditions of the working environment.

# 4.0



## Industry 4.0 Compatible Central Dental Compressor System



**Microprocessor-  
Controlled Unit**

Automation System: The automation system regulates the operating pressures of the compressor motors, equal aging program maintenance, and fault detection. It ensures the operating hours of the motors are balanced with each other. This reduces compressor heating and wear, extending its lifespan.

### Display Screen

Allows monitoring of all stations on a single screen. The screen displays motor operating hours, tank pressure, service warnings, error messages, and ambient temperature.



# DP 8020-20 Series



## CENTAL DENTAL COMPRESSOR SYSTEM



DP 8020-20 2/4-930



DP 8020-20 3/6-930



DP 8020-20 4/8-930

### DP 8020-20 Series Central Dental Compressors

DMS ensures the highest hygiene standards in Central Dental Compressor systems used in dentistry applications. The ISO 8573-1 quality report confirms that our systems have been tested according to international standards, delivering fully hygienic performance.

#### Oil-Free, Moisture-Free, Particle-Free Air

- Oil-Free Air: Class 1 standard with an oil level of 0.01 mg/m<sup>3</sup>.
- Moisture-Free Air: Water vapor level controlled at -43°C.
- Particle-Free Air: No particles detected above 0.1 µm.

### Why Is It Important?

#### Patient Health::

Oil-free, moisture-free, and particle-free air is critical for patient safety.

#### Hygienic Operations:

Air systems fully meet hygiene requirements.

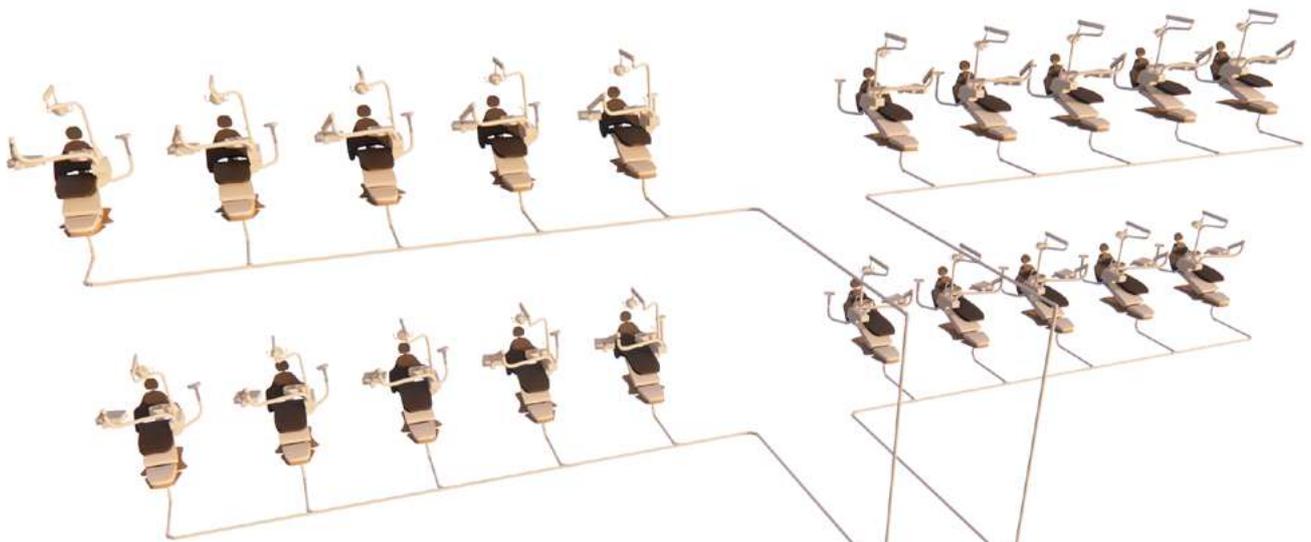
#### Long-Lasting Solutions:

Reliable air ensures the smooth operation of devices.

## Dental Aspirators

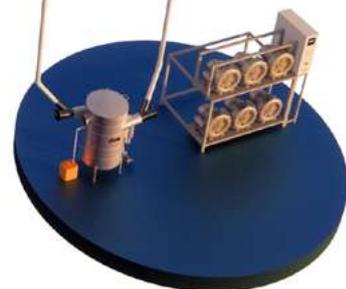


# Central Dental Aspirator Systems



Flow Diagram of  
Central Dental  
Aspiration System

10 dental chair...  
**100** dental chair...  
or **much more...**



# Technology and Unique Design Meeting Dental Requirements



## Uninterrupted and High Aspirator Power

With the advancement of technology in dental treatments, the use of high-speed handpieces has increased. As a result, a powerful aspiration system is required to remove aerosols generated during operations from the environment while still in the patient's mouth, preventing diseases and infections.

DMS Central Dental Aspiration Systems Successfully perform this task by effectively reducing infection risk with an aspiration power of 300 liters per minute. All fluids extracted from the treatment units are collected in the separation tank.

## Technical Specifications of Central Dental Aspirator Systems

CENTRAL DENTAL ASPIRATOR SYSTEMS	8020-30 / DA-6000	8020-30 / DA-9000	8020-30 / DA-12000	8020-30 / DA-15000	8020-30 / DA-18000	8020-30 / DA-20000	8020-30 / DA-25000	8020-30 / DA-30000
NUMBER OF MOTORS	2	3	4	3/5	6	4	5	6
VOLTAGE (V)	400 V (3~)	400 V (3~)	400 V (3~)	400 V (3~)	400 V (3~)	400 V (3~)	400 V (3~)	400 V (3~)
FREQUENCY (HZ)	50 Hz	50 Hz	50 Hz	50 Hz	50 Hz	50 Hz	50 Hz	50 Hz
POWER RATINGS (KW)	4,4	6,6	8,8	12-16,5	13,2	22	27,5	33
CURRENT (A)	11,2	16,8	22,4	38,7	33,6	51,6	64,5	77,4
PRESSURE (-MBAR)	-160	-160	-160	-160	-160	-160	-160	-160
SEPARATOR TANK CAPACITY (LITERS)	300	300	300	300	300	300	300	300
FREE ASPIRATION CAPACITY (LITERS/MINUTE)	10320	15480	20640	26250	30960	35000	43750	52500
ASPIRATION CAPACITY AT -160 MBAR (LITERS/MINUTE)	6000	9000	12000	17400	18000	23200	29000	34800
SEPARATOR TANK PRESSURE (MBAR)	-400	-400	-400	-400	-400	-400	-400	-400
SEPARATOR TANK DRAIN PUMP VOLTAGE (V)	230	230	230	230	230	230	230	230
SEPARATOR TANK DRAIN PUMP FREQUENCY (HZ)	50 / 60	50 / 60	50 / 60	50 / 60	50 / 60	50 / 60	50 / 60	50 / 60
NOISE LEVEL (dB(A))	80	84	87	90	90	91	92	95
ENCLOSURE RATING	IP20 / IP30 / IP40							
MAXIMUM SENSOR FLOW RATE (LITERS/MINUTE)	1200	1200	1200	1200	1200	1200	1200	1200
NUMBER OF UNITS OPERABLE AT 100% CAPACITY	20	30	40	58	60	77	96	116
NUMBER OF UNITS OPERABLE AT 60% CAPACITY	30	50	70	96	100	129	161	194

\* The noise level may vary by  $\pm 3$  dB(A) depending on the acoustic conditions of the working environment.

# 4.0



## Industry 4.0 Compatible

## Central Dental Aspiration Systems

### Display Screen

Allows monitoring of all stations on a single screen. The screen displays motor operating hours, tank pressure, service warnings, error messages, and ambient temperature.



DMS Central Dental Aspirator Systems are high-performance, hygiene-focused vacuum systems specially designed for large-scale clinical facilities such as Faculties of Dentistry, Dental Hospitals, and Oral and Dental Health Centers.

By minimizing sterilization needs and the risk of cross-infection in modern dental treatments, these systems deliver safe, reliable operation for many years thanks to their high suction capacity and durable construction.



### Microprocessor- Controlled Unit

The automation system, which regulates the operating pressures of the aspirator motors, equal aging programming, maintenance, and fault detection, ensures that the operating hours of the motors are balanced with each other. This results in less heating and wear on the aspirator.

# 8020-30 DA SERIES



## CENTRAL DENTAL ASPIRATOR MODELS



8020-30 / DA-6000



8020-30 / DA-9000



8020-30 / DA-12000



8020-30 / DA-15000



8020-30 / DA-18000



8020-30 / DA-20000



8020-30 / DA-25000



8020-30 / DA-30000



# Kompas Central Combined Dental Compressor & Aspirator Models

## 8020-40 KOMPAS SERIES



DP 2/4-930 & DA-10000



DP 2/4-930 & DA-15000

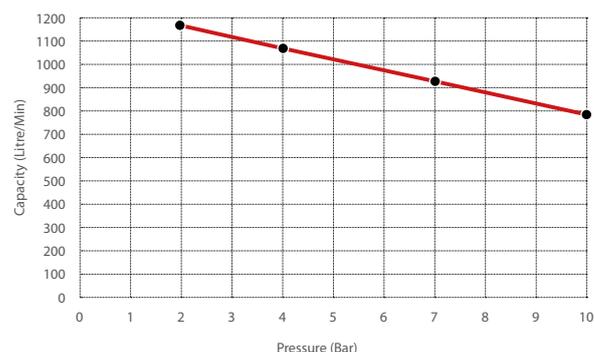


DP 8020-40 4 / 8-930 DA-30000

# 8020-40 KOMPAS SERIES



DMS Kompas Central Compressor & Aspirator Systems feature advanced technology that provides the compressed air and aspiration needed for hundreds of dental treatment and training units from a single source.



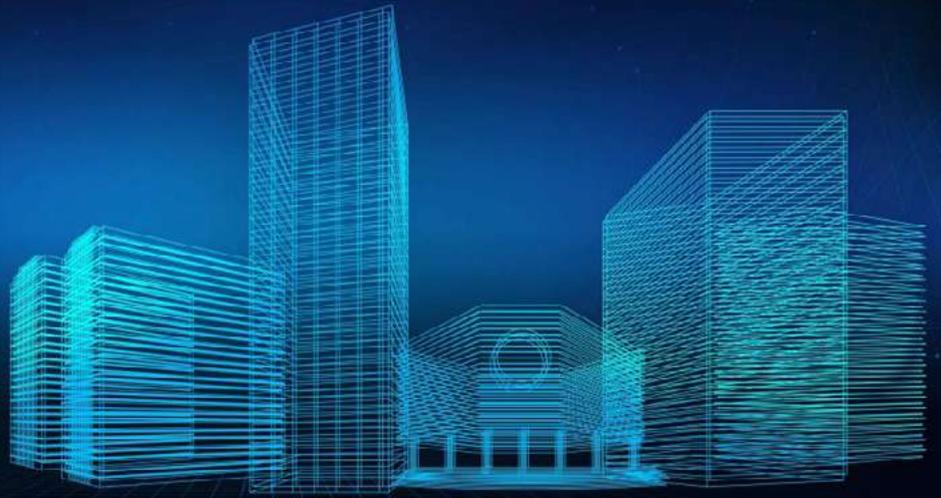
## Kompas Central Combined Dental Compressor & Aspirator Systems Technical Specifications

CENTRAL DENTAL COMPRESSOR & ASPIRATOR SYSTEMS	8020-40 D-KOMPAS DP2/4-930 & DA10000	8020-40 D-KOMPAS DP2/4-930 & DA15000	8020-40 D-KOMPAS DP4/8-930 & DA30000
NUMBER OF COMPRESSOR MOTORS	2	2	4
NUMBER OF ASPIRATOR BLOWERS	2	3	6
VOLTAGE (V)	400 V (3~)	400 V (3~)	400 V (3~)
FREQUENCY (HZ)	50 Hz	50 Hz	50 Hz
POWER RATINGS (KW)	26	31,5	61,5
AIR PRODUCED AT 5 BAR (LITERS/MINUTE)	2040	2040	4080
OPERATING PRESSURE (BAR)	6-8	6-8	6-8
COMPRESSED AIR TANK CAPACITY (LITERS)	500	500	500
SAFETY VALVE ACTIVATION PRESSURE (BAR)	10	10	10
DRYER TYPE	GAS-TYPE COOLING PRINCIPLE		
DRYING CAPACITY (CM <sup>3</sup> )	150 - 210		
NUMBER OF UNITS OPERABLE AT 100% CAPACITY	45	45	90
NUMBER OF UNITS OPERABLE AT 60% CAPACITY	75	75	151
PRESSURE (-MBAR)	-160	-160	-160
SEPARATOR TANK CAPACITY (LITERS)	300	300	300
FREE ASPIRATION CAPACITY (LITERS/MINUTE)	17500	26250	52500
ASPIRATION CAPACITY AT -160 MBAR (LITERS/MINUTE)	11600	17400	34800
SEPARATOR TANK PRESSURE (MBAR)	-400	-400	-400
SEPARATOR TANK DRAIN PUMP VOLTAGE (V)	230	230	230
SEPARATOR TANK DRAIN PUMP FREQUENCY (HZ)	50 / 60	50 / 60	50 / 60
MAXIMUM SENSOR FLOW RATE (LITERS/MINUTE)	1200	1200	1200
NOISE LEVEL (dB(A))	94	94	95
ENCLOSURE RATING	IP20 / IP30 / IP40		
NUMBER OF UNITS OPERABLE AT 100% CAPACITY	38	58	116
NUMBER OF UNITS OPERABLE AT 60% CAPACITY	64	96	194

\* The noise level may vary by  $\pm 3$  dB(A) depending on the acoustic conditions of the working environment.

# BIM

Building  
Information  
Modeling

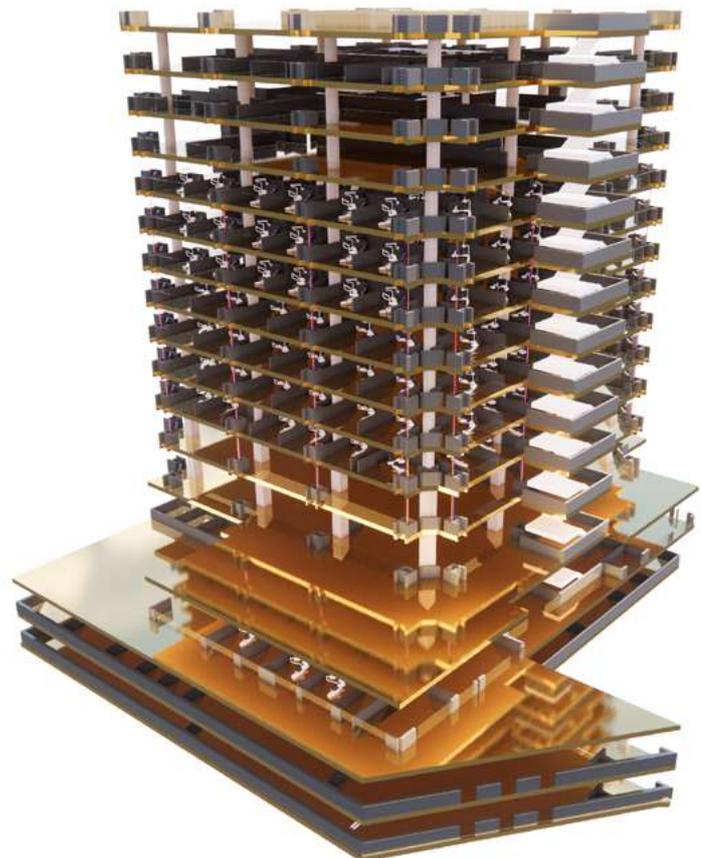


## BIM

(Building Information Modeling)

Building Information Modeling (BIM) Building Information Modeling is a process supported by various tools and technologies that involves the creation and management of digital representations of the physical and functional characteristics of spaces.

DMS, within the BIM system, prepares 3D digital intelligent models of all dental equipment produced in dental project design and uses them in its projects.



**Advanced Technology,  
Excellent Service...**



# Workflow Process in DMS Projects



# Central Dental Compressed Air and Aspirator Systems

## TECHNICAL INFRASTRUCTURE APPLICATIONS - REFERENCE LIST -



45 YIL  
1980

**dms**  
Dental Medikal Sanayi

