

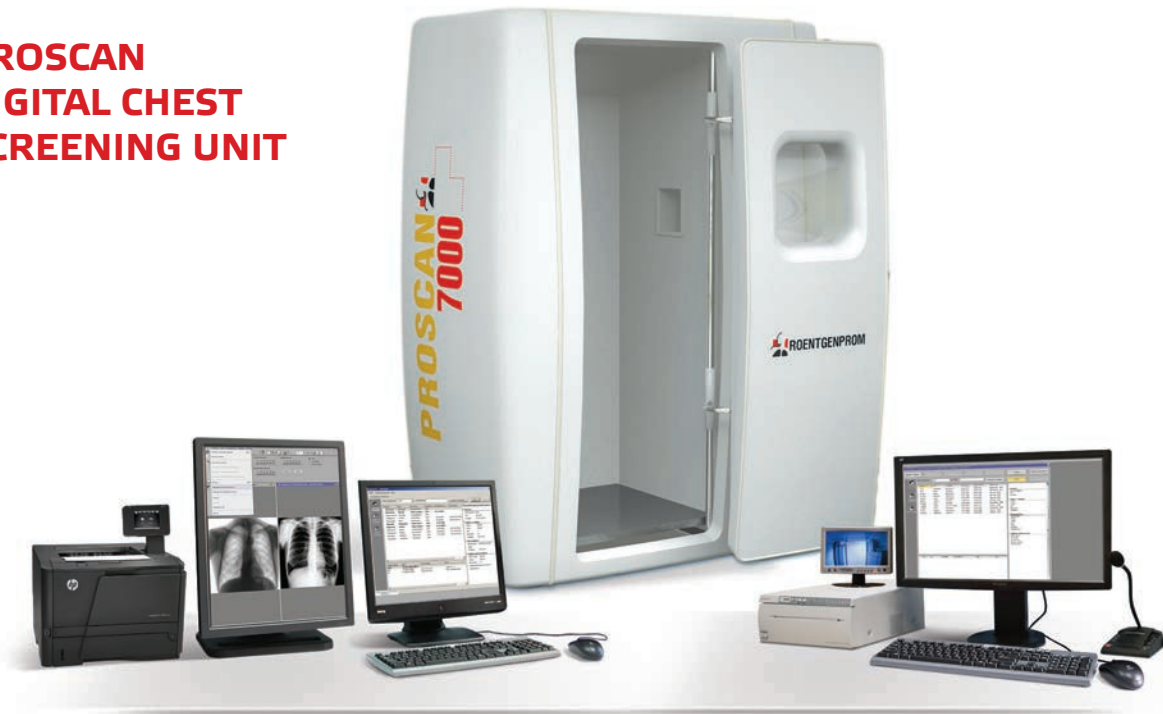


DIGITAL CHEST SCREENING UNIT

PROSCAN series



PROSCAN DIGITAL CHEST SCREENING UNIT

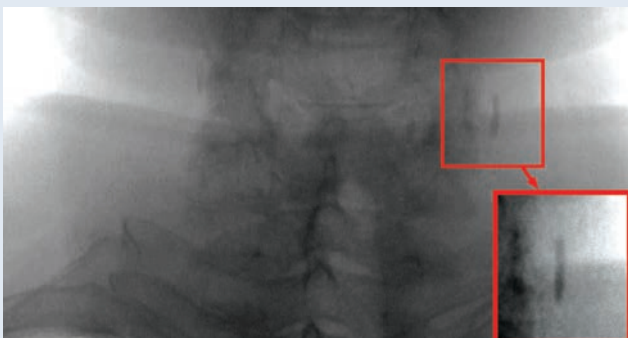


SPECIAL PROSCAN SOFTWARE APPLICATIONS

The carotid artery atherosclerotic plaque calcification detection

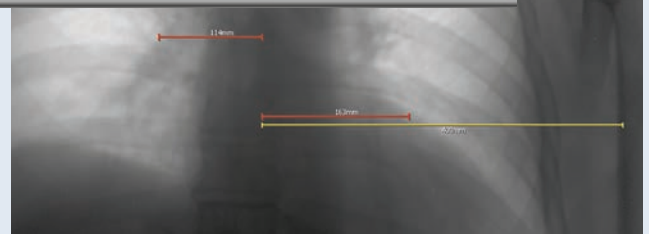
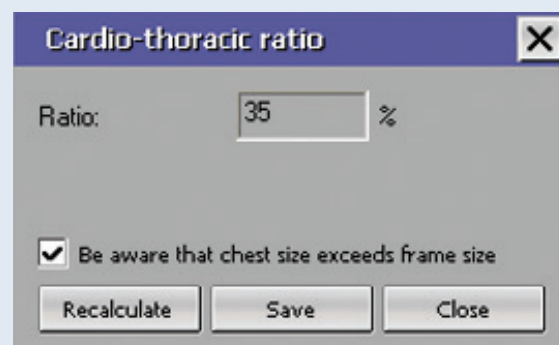
This option serves for prevention of ischemic cerebral stroke, which in most cases (80%) is a result of extracranial atherosclerosis.

Detection of calcium-density shadows in the carotid artery projections is simplified by the use of the carotid artery atherosclerotic plaque calcification hardware-and-software system.



The cardiothoracic ratio calculation function

Heart enlargement is detected automatically (physician participation is not required) through analysis of digital fluorograms of the thoracic spine, thus allowing identification of patients at risk for cardiac diseases involving heart enlargement. The physician can correct measurements using the manual adjustment option while viewing the image.



THE BEST SOLUTION FOR DIGITAL CHEST SCREENING

The ProScan chest screening unit is the best solution for low-dose preventive examination of the chest in anteroposterior and lateral standing position, as they enable digitization of images.

The principal advantages of these machines include a low effective dose, instantaneous high quality imaging, and guaranteed reliability of operations.

The linear silicon detector does not require periodic maintenance.

The X-ray protective cabin made of modern composite materials and equipped with a motorized door and a patient elevator allows installation of the system in a room with no special X-ray protection and decreases staff radiation exposure many times.

The ProScan rightly occupies a leading position in the Russian market.

ProScan-2000

Spatial resolution 2,2 line pairs/mm

Contrast sensitivity 1 % if the radiation dose to the image receptor per image is 200 μ R

ProScan-7000

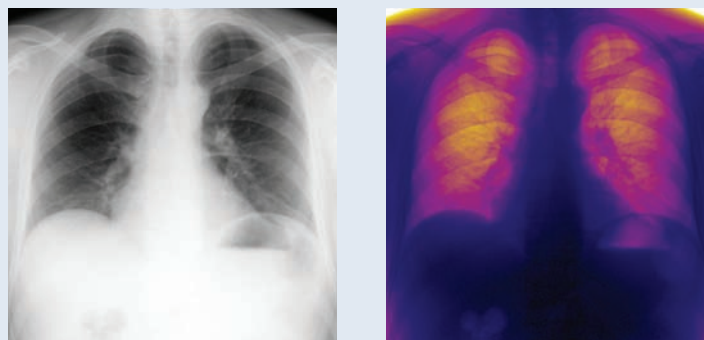
Spatial resolution 3,1 line pairs/mm

Contrast sensitivity 1 % if the radiation dose to the image receptor per image is 250 μ R

The osteoporosis screening test function

Identification of patients at risk for osteoporosis and bone fractures is particularly important for elderly population. This technique allows identification of a subset of patients who should be referred for further clinical assessment with dual-energy X-ray absorptiometry, after which these patients will be able to receive appropriate treatment for osteoporosis with subsequent follow-up.

Inversion and false-colour imaging



Press 'Calculate'

Clav. C.spinal C-ribs G-ribs L.Spinal T.Spina B-ribs.

Auto

Man.

To diag.

Decision on T-index: Osteoporosis !!!

Density indiciz:
T= -9.57, Z= -8.77

Final densities of bone tissue

Title	Projection(no...)	Volumic(no p...
Clavicles	0.86 (> 1.36)	0.78 (> 1.23)
Center of spine	3.20 (> 5.05)	0.91 (> 1.44)
Back ribs	0.39 (> 0.61)	0.79 (> 1.25)
Forward ribs	0.26 (> 0.41)	0.78 (> 1.23)
Bottom of spine	3.46 (> 5.47)	0.90 (> 1.42)
Top of spine	2.80 (> 4.42)	0.91 (> 1.44)
Ribs, lateral part	0.00 (> 1.65)	0.00 (> 1.24)

Calculate Save Close

2D profile

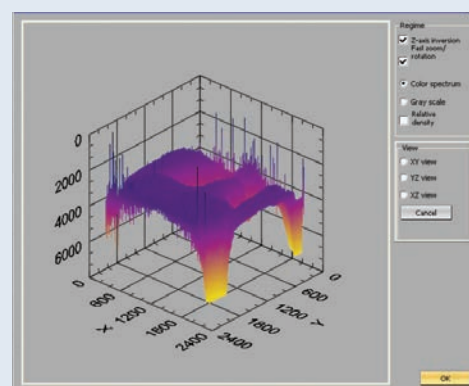
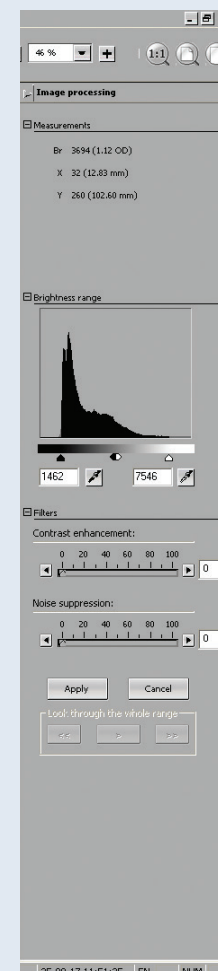


Image optimization

One of the advantages of digital X-ray imaging over films is that the former enable to combine high-quality view of both high-density and low-density objects in the same image.

For instance, one can evaluate bones and shadows overlapping the heart shadow and the pulmonary pattern at the same time or small low-density lesions in a patient with lymphangitis without obtaining two images in two modes. This, however, requires that the physician perform appropriate digital processing of the image. The process can be accelerated and simplified by using the entire dynamic brightness range of the image.



Our chest screening units are available in a wide range of configuration options.

We are prepared to offer a solution that will meet the working requirements and budget of any health center: open-type or equipped with a protective X-ray cabin, stationary or mobile cabinets for digital chest screening.

The ProScan is the best device for chest screening

The state-of-the-art digital chest screening unit is not simply a lung disease screening device. The ProScan software developed by our specialists helps obtain more diagnostic data with dedicated software applications.

	ProScan-2000	ProScan-7000
X-ray protective cabin		
X-ray protective cabin made of composite materials	yes	yes
Lead equivalent	1,2 mm	1,2 mm
Video camera for patient controlling	yes	yes
Video monitor for patient controlling	yes	yes
Scanning solid state linear detector		
Format	390 × 390 mm	390 × 390 mm
Spatial resolution	2,2 line pairs/mm	3,1 line pairs/mm
Dose per shoot at detector plane	1,5 µGy	1,8 µGy
X-ray tube		
X-ray tube with rotating anode, rotation speed	3 000 rpm	9 000 rpm
Effective focal spot size	0,3 mm	0,3 mm
High-frequency X-ray power supply device		
Capacity	20 kW	20 kW
Voltage range	40–125 kV	40–125 kV
Maximum consumable capacity	4 kVA	7 kVA
Workstation of radiologist		
	yes	yes

The manufacturer reserves the right to make changes in complete, technical parameters and design of the equipment.

NP JSC AMICO
P. O. Box 73, Moscow, Russia, 115432
tel.: +7 495 742-41-60
fax: +7 495 742-94-14
info@amico.ru



www.amico.ru

MOBILE TRUCK-BASED DIGITAL CHEST SCREENING CABINET



3D tour

© NP JSC AMICO, 2021. All rights reserved.

SEP-2021