







HACKENSACK, NJ 07601 TEL: 888.495.7440 / FAX: 201.880.7799

WWW.DDSBELT.COM



#### DDS MAX CERVICAL AIR TRACTION COLLAR







Disc Disease Solutions Introduces the DDS MAX Cervical Traction Device, A revolutionary orthopedic traction device to assist in the treatment of cervical neck pain

Through the use of VAPTM Technology (Vertical Air Pressure), when inflated, the DDS MAX collar expands vertically, elongating and unloading the cervical spine, increasing the intervertebral disc space significantly reducing disc pressure.

This traction force or unloading of the discs can quickly provide significant pain relief. Researchers have scientifically identified proven benefits for patients challenged with bulging discs, herniated discs, degenerative discs and radicu¬lopathy in the arms with as little as two 30 minute treatments per day.

The DDS Max is soft, comfortable, lightweight and easy-to-use. Users will feel immediate support as well as providing maximum comfort while effectively eliminating or minimizing pain levels

Recommended air pressure is 15-21 lbs. PSI

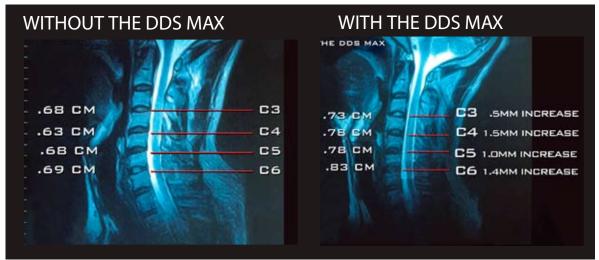


#### Features of the DDS MAX

- Pain Relief For Bulging Disc, Herniated Discs, Degenerative Disc Disease And Radiculopathy In The Arms
- Advanced Tubeless Air Cell Design
- Waterproof, Moisture Proof Resistant Material For Machine Washing
- Minimize Pain/ Reduce Pain Medication

#### Treatable Symptoms:

- · Cervical Pain Syndrome
- · Pinched Nerve
- · Cervical Radiculopathy
- · Herniated Disc
- · Bulging Disc
- · Degenerative Disc Disease
- Chronic Neck Pain
- Chronic Migraine





# DDS 300 - Retail LUMBAR TRACTION

# "Love your life without lower back and radiating pain!"







Expansion Mechanism

† 7"

Before Inflation (11cm wide)

After Inflation (18cm wide)

Before Inflation(Rear View) After Inflation(Rear View) After Inflation(Front View)

The Traction belt is vertically expanded by approx. 7cr (2.8"), thereby helping to increase the interval betwee intervertebral discs.

The process is simple: DDS acts to provide traction between the lower part of the rib cage and the upper part of the hip creating weight-bearing forces away from the lower back. By increasing the intervertebral disc space, pressure applied on the nerve root is relieved, thereby, eliminating pain while assisting active-rehabilitation. The vertically expandable columns create a virtual support beam providing spinal decompression for the lumbar vertebrae. Disc Disease Solutions will speed up your recovery and help you enjoy the daily activities that were once too difficult.

DDS is thin, lightweight and offers a high degree of mobility. It can be discreetly worn under clothing allowing you to perform daily activities such as driving, walking and standing for long periods of time, and enabling those with an active lifestyle to work, enjoy sports and other leisure activities pain-free.

#### TYPICAL INDICATIONS

- Herniated, Bulging discs
- Lumbar acute/chronic sprain
- Spondylolysis and spondylolisthesis
- $\bullet\,$  Low back pain caused by weight or strenuous jobs requiring heavy lifting
- Degenerative discs
- Spinal Stenosis
- Sciatica
- Congenital weakness in waist
- Compression fracture

# AIR INJECTION NOZZLE Allows simple connection to pump for inflation. Simply unscrew nozzle to deflate the Traction Belt.

- 2 100% COTTON LINING Protects skin and diminishes sensitive skin problems. Long-term comfort is provided by a high-quality, natural, cotton lining.
- 3 ONE-TOUCH ELASTIC, AUXILIARY STRAFor additional security and adjustment.

#### DDS 300 SIZING CHART

SIZE	TORSO MEASUREMENT
S	26-28 inches
М	29-32 inches
L	33-35 inches
XL	36-38 inches
2XL	39-41 inches
3XL	42-44 inches
4XL	45-48 inches
5XL	49-51 inches
6XL	52-55 inches
7XL	56-59 inches

- \* Measurement around the naval
- \* Extension piece available for larger sizes



Hand Air Pump



# **DDS 500** - LUMBAR TRACTION

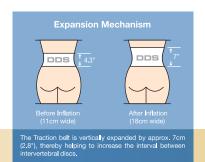
## THE MOST VERSATILE BRACE OF ITS KIND!

"Love your life without lower back and radiating pain!"









The process is simple: DDS acts to provide traction between the lower part of the rib cage and the upper part of the hip creating weight-bearing forces away from the lower back. By increasing the intervertebral disc space, pressure applied on the nerve root is relieved, thereby, eliminating pain while assisting active-rehabilitation. The vertically expandable columns create a virtual support beam providing spinal decompression for the lumbar vertebrae. Disc Disease Solutions will speed up your recovery and help you enjoy the daily activities that were once too difficult.

DDS is thin, lightweight and offers a high degree of mobility. It can be discreetly worn under clothing allowing you to perform daily activities such as driving, walking and standing for long periods of time, and enabling those with an active lifestyle to work, enjoy sports and other leisure activities pain-free.

The DDS 500 is the solution for patients who cannot tolerate the discomfort of a rigid body jacket yet require similar support. It is especially valuable for pre and post surgery, providing with equal stability as a stiff body jacket. As the patient progresses and requires less support, the detachable rigid panels can be removed to create a semi-rigid support with one or no support panels. It easily converts to a soft LSO and provides greater flexibility.

#### TYPICAL INDICATIONS

- Herniated, Bulging discs
- Lumbar acute/chronic sprain
- Spondylolysis and spondylolisthesis
- Low back pain caused by weight or strenuous jobs requiring heavy lifting
- Degenerative discs
- Spinal Stenosis
- Sciatica
- Congenital weakness in waist
- Compression fracture
- AIR INJECTION NOZZLE
   Allows simple connection to pump for inflation. Allows for very easy pressure
   adjustments and deflation.
- 2 100% COTTON LINING Long-term comfort is provided by a high quality, natural, cotton lining. Protects skin and diminishes sensitive skin problems.
- 3 ONE-TOUCH ELASTIC, AUXILIARY BELT Provides additional security with easy adjustments.
- ANTERIOR AND POSTERIOR RIGID PANELS Detachable panels...





#### **FEATURES OF DDS**

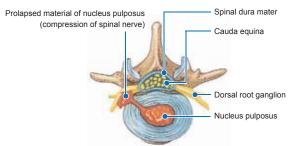
- Pain relief for patients with Herniated and Bulging Discs, Muscle Spasms, Sciatica, Spondylolysis and Spinal Stenosis
- · Facilitate Remolding and Healing by reducing load off the spine
- Prevents Re-herniation
   Lessen the amount of pain for patients
- Reduces pain medication
   Helpful for pre-surgical pain problems
- · Relaxes muscle spasms, muscles cramps, strain and pain
- · Reduce low back pain caused by weight or strenuous jobs requiring heavy lifting or long hours of driving
- Helps maintain proper posture
   Very lightweight and comfortable allowing a full range of motions
- · Can be worn discreetly under clothing

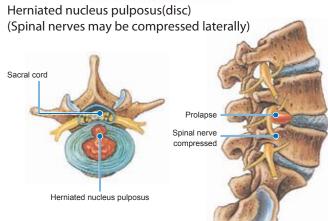


#### PRINCIPLE OF OPERATION

- Before treatment: The herniated or bulging intervertebral disc or herniated nucleus pulposus applies pressures on the nerve root, causing pain.
- After treatment: DDS helps resume the appropriate position of the intervertebral disc, or nucleus pulposus, by increasing the intervertebral space, thereby, reducing the pressure between the lumbar/cervical spine.







HCPCS APPROVED L0631 & L0648

ARE REIMBURSEM urinstictions 1/1	ENT SCHEDULE /2014 - 12/31/2014	LIMEAR SACIAL DITHESIS
7	K \$944.87	MT \$980.65
A	\$973.32	NC \$973.32
Α.	R \$973.25	ND \$980.65
Α.	Z \$944.87	NE \$963.33
C	A \$944.87	NH \$944.87
(	O \$980.65	NI \$944.87
10	T \$944.87	NM 5973.25
	C \$944.87	NV \$944.87
/ 1	E \$944.87	NY \$944,87
F	L \$973.32	OH \$968.06
(	A \$973.32	OK 5973.25
\ I	\$944.87	OR \$944.87
3 1	A \$963.33	PA \$944.87
	D \$944.87	PR \$1039.33
* \ I	\$968.06	RI \$944.87
mi	N \$968.06	SC 5973.32
2/ K	\$ \$963.33	SD \$980.65
K	Y \$973.32	TN \$973.32
0	A \$973.25	TX \$973.25
Λ	AA \$944.87	UT \$980.65
N	AD \$944.87	VA \$944.87
N	AE \$944.87	VI \$1039.33
N	\$968.06	VT \$944.87
٨	IN \$968.06	WA \$944.87
٨	1O \$963.33	WI \$968.06
N	LS \$973.32	WV \$944.87
	No. of Contract of	WY \$980.65

#### **DDS 500 SIZING CHART**

SIZE	TORSO MEASUREMENT	PANEL SIZE
S	26-28 inches	S
М	29-32 inches	М
L	33-35 inches	М
XL	36-38 inches	М
2XL	39-41 inches	L
3XL	42-44 inches	L
4XL	45-48 inches	XL
5XL	49-51 inches	XL
6XL	52-55 inches	2XL
7XL	56-59 inches	2XL

<sup>\*</sup>Measurement around the naval

<sup>\*</sup>Extension piece available for larger sizes





# **DDS DOUBLE** - LUMBAR TRACTION

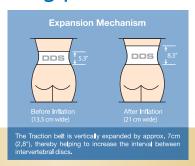
## THE MOST VERSATILE BRACE OF ITS KIND!

"Love your life without lower back and radiating pain!"









The process is simple: Our unique and patented Vertical Air Pressure Technology creates traction as the brace is inflated. This action increases the intervertebral disc space, decreases axial loading, and the pressure applied on the nerve root is relieved. Pain is reduced while assisting active rehabilitation.

The DDS DOUBLE Spinal-Air Decompression Braces function to provide therapeutic relief when inflated with air by anchoring up underneath the rib cage pushing upwards and down against the pelvic girdle pushing downwards. This action stretches the torso vertically diverting the weight-bearing forces away and reducing pressure within the lumbar spine region.

Our LSO Decompression Braces are the ideal solution for patients who cannot tolerate the discomforts of a rigid body jacket

yet require similar support. It is especially valuable for pre and post surgery; as the patient progresses and requires less support, the detachable rigid panels can be removed to create a semi-rigid support, easily converting in to a soft LSO and providing greater flexibility.

Our Belts can be discreetly worn under clothing allowing you to perform daily activities and enabling those with an active lifestyle to enjoy leisure activities pain-free.

#### **TYPICAL INDICATIONS**

- Herniated / Bulging discs
- Lumbar acute / chronic sprain
- Spondylolysis and spondylolisthesis
- Compression fracture in the lumbar region
- Failed surgery syndrome
- Low back pain due to physical and/or physiological conditions
- Strenuous jobs requiring heavy lifting and/or long hours driving
- Degenerative disc disease
- · Spinal stenosis
- Sciatica
- · Congenital weakness in waist

adjustments and deflation.

- AIR INJECTION NOZZLE
   Allows simple connection to pump for inflation. Allows for very easy pressure
- 2 100% COTTON LINING Long-term comfort is provided by a high quality, natural, cotton lining. Protects skin and diminishes sensitive skin problems.
- DUAL SUPPORT VELCRO ATTACHMENTS Provides additional security with easy adjustments.
- 4 ANTERIOR AND POSTERIOR RIGID PANELS Detachable panels...

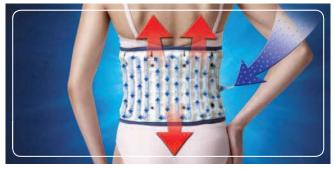




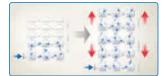
#### **FEATURES OF DDS**

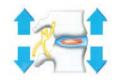
- Relaxes muscle spasms, muscle cramps and helps relieve strain and pain
- Decreases axial loading Increases disc height
- · Advanced tubeless air cell design for narrow fit
- Can be worn discreetly under clothing
- Helps maintain proper posture (Improper posture places the upper body weight on the discs that causes back pain)
- · Assists individuals with strenuous jobs
- Very lightweight and comfortable
- Made of 100% highly durable soft cotton lining
- Waterproof moisture-proof resistant material for machine washing
- Simple to use





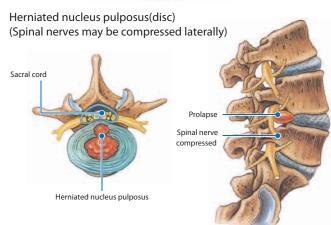
 $\text{VAP}^{\ ^{\text{TM}}}$  Technology  $\$  delivers high vertical air pressure to create traction in the affected area and to protect the vertebrae against gravity.





Our uniquely designed air cells evenly distribute air pressure effectively increasing the invertebral disc space.

# Prolapsed material of nucleus pulposus (compression of spinal nerve) Cauda equina Dorsal root ganglion Nucleus pulposus



#### HCPCS APPROVED L0637 & L0650

		-	The state of the s
MEDICARE REIMBURSEMENT		100	IAI-SACALOFFICES
All Juristicskins 1/1/20	14-12/31/2014		
AK	\$1,141.04	MT	5988.78
AL	\$1,290.74	NC	\$1,290.74
AR	\$1,151.77	ND	\$988.78
AZ	\$1,113.55	NE	\$1,117.65
CA	\$1,113.55	NH	\$1,077.73
CO	\$988.78	NI	5988.78
CT	\$1,077.73	NM	\$1,151.77
DC DC	\$988.78	NV	\$1,113.55
DE	DATE COMMISSION	NY	\$988.78
FL	\$1,290.74	OH	\$1.221.67
GA	\$1,290.74	OK	\$1,151.77
HI	\$1,220.12	OR	\$1,034,51
IA	\$1,117.65	PA	5988.78
ID	\$1,034.51	PR	\$1,095.49
IL IL	\$1,221.67	RI	\$1,077.73
L pro IN	91,221,67	SC	51,290.74
KS	\$1,117.65	SD	5988.78
KY	\$1,290.74	TN	\$1,290.74
LA	\$1,151.77	TX	\$1,151.77
MA	THE RESERVE OF THE PARTY OF THE	UT	\$988.78
	\$988.78	VA	5988.78
ME	BASIC COLORDON COLORDON	VI	5988.78
MI	Market Control Control	VT	\$1,077.73
	\$1,221.67	WA	\$1,034.51
	\$1,117.65	WI	\$1,221.67
MS	\$1,290.74	WV	\$988.78
	-	WY	5988.78

#### **DDS DOUBLE SIZING CHART**

SIZE	TORSO MEASUREMENT	PANEL SIZE
S	26~28 inch	S
M	29~32 inch	М
L	33~35 inch	М
XL	36~38 inch	М
2XL	39~41 inch	L
3XL	42~44 inch	L
4XL	45~48 inch	XL
5XL	48~51 inch	XL

<sup>\*</sup>Measurement around the navel

www.DDSbelt.com

<sup>\*</sup>Extension piece available for larger sizes



# **DDS OA KNEETRAC**

MULTI-COMPARTMENTAL OA DECOMPRESSION BRACE

HCPCS CODE K0902











# **ACCESSORIES**

#### **AUTO PUMP, MANUAL HAND AIR PUMP & DDS EXTENSION BELT**

#### DDS AUTO PUMP

#### One Touch Automatic Pump ONLY for DDS Lumbar Braces





#### USB CHARGING PORT

- . A full charge can last for 45 days when used 2 minutes per day.
- . Pump is fully charged when the red light on the charger turns green.









#### DDS is manufactured under the following standards

- ISO 9001: 2000(International Quality Management System)
- ISO 13485 (International Quality System Medical Devices)
   EN 46002(European Quality System Medical Devices)

- CE Mark
  FDA ER No. 9611754 and Device Listing No. B 115761 in USA
- Notification No. BE/CA01/2-03702-000011 Belgium
- Notification No. Be/CA01/2-03702-00002 Belgium
- Clinical consultation: Department of Orthopedic Surgery, Inje University, Seoul Paik Hospital, Korea
- · Korean Patent No.: 142202
- Japanese Patent No.: 2911437 • US Patent No.: 5980560
- International application No.:PCT/KR00/00368

#### DDS AUTO PUMP - One Touch Automatic Pump only for DDS Lumbar Braces

With one touch of a button, the pump will automatically inflate your DDS Lumbar Brace up to 15 PSI.

#### With only 2 steps

Connect the Air Injection Tong to the Air Valve precisely.



Push the button



- · Easy as one touch
- · Automatic Start & Stop
- Wireless
- Portable
- Rechargeble
- No Batteries Necessary

The pump will automatically inflate your DDS Lumbar Brace up to 15 PSI. You can stop inflating at any point by pressing the button once.

The red light will blink 5 times accompanied by 5 beeps when inflation is almost complete and inflation will stop immediately after the 5th beep.

#### Warning:

The DDS Auto Pump should ONLY be used with DDS LUMBAR BRACES.

#### **DDS** EXTENSION



Front View



Rear View

#### Manual Hand Air Pump





# **CLINICAL STUDIES**

These studies have been carried out at the Department of Orthopedic Surgery, College of Medicine, Inje University Seoul Paik Hospital. The studies were performed by Professor Byungjik Kim, Professor Shinwoo Park and their teams.

#### I. INTRODUCTION

This study has been performed in order to evaluate the effectiveness of the DDS 500 LSO Brace before and after use on patients with low back pain.

Studies reveal significant decreases in pain levels and isokinetic evaluations demonstrate positive radiographic and muscular strength changes of both flexor and extensor muscles at the lumbar region.

# II. PATIENT PROFILE AND METHOD OF STUDY

#### 1. Patient Profile

22 patients with acute or chronic low back pain; age ranging from 19 to 58 with average age of 44, 9 men and 13 women, 9 patients with herniated disc, 9 patients with acute low back pain and 4 patients with chronic low back pain.

Table 1. Age & Sex Distribution

Age	Male	Female	Total
20-29	2	1	3
30-39	1	3	4
40-49	2	4	6
50-59	3	5	8
60-69	1	0	1
Total	9	13	22

#### 2. Method of Study

First, MacNab's criterion was used to examine changes of pain. Second, radiographic imaging was used to analyze by photographing side views of lumbar and sacral vertebrae, comparing with those x-rays before wearing the DDS 500 LSO Brace. Third, The Cybex 6000 Trunk Extension Flexion (TEF) Unit was used to measure and analyze muscular strength of the flexor and the extensor at the lumbar vertebrae.

# III. RESULTS OF THE STUDY

#### 1. Changes in Pain Status

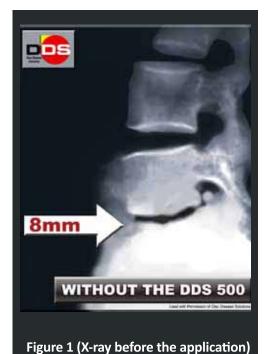
MacNab's criteria were used to evaluate the pain. "Excellent" is a state without pain, without restriction of movement and which would allow the subject to work normally. "Good" is a state with occasional pain, but which would allow the subject to work normally. 'Fair" indicates slight progress, and "Poor" reflects no progress. The results in Table 2 show that approximately 85% reported favorable results with 3 subjects reporting "Excellent" relief of pain and 15 subjects reporting "Good" among the total of 22 subjects.

Table 2. Pain relief before and after application of Air corset (DDS 500 LSO Brace)

Condition	Before	After
Excellent	-	3
Good	1	15
Fair	17	3
Poor	4	1

#### 2. Radiographic Changes

Side view radiographic imagining of the lumbar and sacral vertebrae on 12 patients before and after the application of the DDS 500 LSO Brace, clearly demonstrated that the anterior curvature of the lumbar vertebrae had increased and the inter-vertebral disc interval at the 4th and 5th segment of the lumbar vertebrae had broadened by an average of 3mm.



The interval between lumbar

vertebrae: 8mm

11mm

WITH THE DDS 500

Det at Primary of the Bases have

Figure 2 (X-ray after the application)

The interval between lumbar

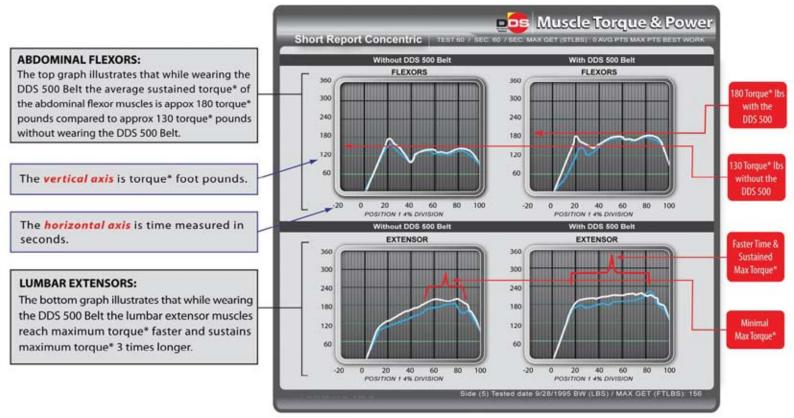
vertebrae: 11mm

DRESSURA

DOS BE



#### DDS 500 VS. MUSCLE ATROPHY



#### CONCLUSION:

DDS 500 promotes muscle stimulation and activity, which is in contrast to most all other lumbar supports which limit mobility thus promoting muscle atrophy resulting in weakness of the lower back and dependency upon the brace.

#### V. EFFICACY AND EFFECT OF THE DDS LSO BRACE

The DDS 500 LSO Brace is judged to have effects on both acute and chronic low back pain caused by the following factors:

- Acute & Chronic Sprain of Lumbar Vertebrae
- Lumbar Facet Syndrome
- Herniated Interverterbral Disc
- Bulging Disc
- Spondylolisthesis
- Spinal Stenosis
- Spondylosis
- Disc Disease

#### IV. CONCLUSION

It was shown that approximately 85% of the subjects reported either "Excellent" or "Good" results after 3 days of using the DDS 500 LSO Brace (3 Excellent, 15 Good out of a total of 22 patients). In the radiographic test and isokinetic evaluation, the increase in the anterior curvature of the lumbar vertebrae and increased distraction between the fourth and fifth lumbar vertebrae were found. Also, the mobility of extensor muscles was improved. These results were obtained from both the subjective and objective examination of the patients and lead us to believe that use of DDS 500 LSO Brace can play an important and effective role in the treatment of both acute & chronic low back pain patients.



# ICD9 CODING REFERENCE SHEET DECOMPRESSION LSO BRACE

738.5	Other acquired deformity of back or spine
741.00	Spina bifida; with hydrocephalus
742.51	Congenital anomalies of spinal cord; diastematomyelia
754.2	Congenital musculoskeletal deformities; of spine congenital postural: lordosis, scoliosis
806.9	Fracture of vertrbral column w/ spinal cord injury
806.9	Fracture of vertrbral column with spinal cord injury
722.8	Postlaminectomy Syndrome
846	Sprains and strains of sacroiliac region
952	Spinal cord injury w/o evidence of spinal bone injury
V54.17	After care for healing traumatic fracture of vertebrae
V54.27	After care for healing pathologic fracture of vertebrae
DDS 500 C	ODES
722.10	Lumbar intervertebral disc w/o myelopathy
722.83	Intervertebral disc disorder (lumbar region)
847.2	Lumbar strain/sprain
756.11	Spondylolysis, lumbosacral region
722.52	Degenerative lumbar/lumbosacral intervertebral disc
782	Paresthesia
Either DDS	500 or DDS Double
721.9	Spondylosis
722.1	Displacement of thoracic or lumbar intervertebral disc w/o myelopathy
722.73	Intervertebral disc disorder w/ myelopathy
724.6	Disorders of sacrum /Spinal instability
728.85	Myospasm
756.1	Anomalies of spine
756.12	Spondylolisthesis
724.0	Spinal stenosis, other than cervical
722.5	Degeneration of thoracic/lumbar intervertebral disc
756.15	Fusion of spine (vertebra), congenital
724.3	Sciatia (Neuralgia/neuritis of sciatic nerve)
724.2	Lumbago (low back pain/syndrome, Lumbalgia
724.8	Facet syndrome
839.20	Dislocation; lumbar vertebra
756.13	Absence of vertebra, congenital

7XL N/A 56~59 INCH	(Criteria must also be transcribe	ad onto patient's chart notes)
Physician Signature:		Date:
Physician Name Printed:	NPI	_/ UPIN
,		



# **DDS CERTIFICATION PROGRAM**

# HANDS ON CERTIFICATION PROGRAMS ONLINE CERTIFICATION PROGRAMS

#### MANUFACTURERS CERTIFICATION OF COMPLETION





# DDS MERCHANDISING PROGRAMS

#### A. MANNEQUIN

- 3 DDS 500 Braces
- 1 DDS 500 Refurbished Brace to attach to the Mannequin
- Brochure stand with brochures

Price: \$799.00

Limit one display each per location and limited time only



#### B. PORTABLE DVD PLAYER W/ DVD RUNNING DDS HIGHLIGHTS

- 2 DDS 500 Braces
- Brochure stand with brochures

Price: **\$599.00** 

\* Limit one display each per location and limited time only



## DDS POSTCARD MARKETING PROGRAMS







Your Company Info

Option 1: Purchase postcards seperately and run in-house direct mail campaign

Option 2: Purchase mail campaign which includes postcards, postage and labeling (must upload contact list)

	250	500	750	1000	2500	5000
4x6 Postcard (Mailing)	.94 Each	.81 Each	.75 Each	.70 Each	.65 Each	.60 Each
4x6 Postcard (Print Only)	.28 Each	.23 Each	.18 Each	.14 Each	.10 Each	.05 Each
6x9 Postcard (Mailing)	1.27 Each	1.00 Each	.94 Each	.89 Each	.77 Each	.71 Each
6x9 Postcard (Print Only)	.70 Each	.60 Each	.50 Each	.40 Each	.30 Each	.20 Each

**Goto WWW.DDSBELT.COM to get started** 



# **ORDERING STRATEGIES**



## **Size Utilization History Data**

This data is provided for you to assist you with optimal inventory levels within your facility

BRACE SIZE	DDS 500	DDS DOUBLE
SMALL	2%	1%
MEDIUM	8%	5%
LARGE	15%	11%
X-LARGE	21%	16%
2X-LARGE	18%	17%
3X-LARGE	15%	16%
4X-LARGE	11%	14%
5X-LARGE	10%	20%
6X-LARGE	N/A	N/A
7X-LARGE	N/A	N/A

